

RECEIVED 1 1915

# The American FERTILIZER

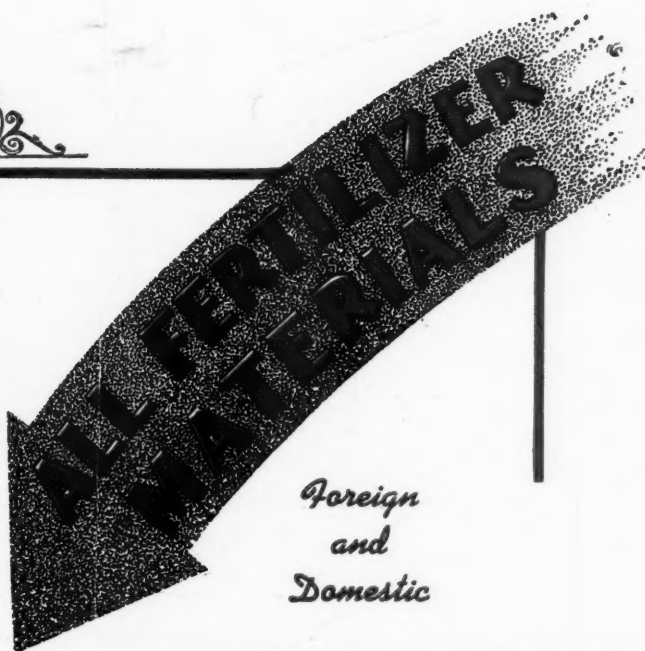


• •  
*AMMONIUM NITRATE*

•  
*SULPHATE of AMMONIA*

•  
*ORGANIC AMMONIATES*

•  
*SULPHUR*  
• •



*Foreign  
and  
Domestic*

---

## ASHCRAFT-WILKINSON CO.

---

**VEGETABLE OIL MEALS  
AND  
FEEDSTUFFS**

---

*Exclusive Distributors Duval Texas Sulphur*

---

HOME OFFICE  
**ATLANTA, GA.**  
Cable Address: ASHCRAFT

OFFICES  
**CHARLESTON, S. C.  
NORFOLK, VA.**



# *It's in the* **BAG**

- ★ AND THE RIGHT BAG
- ★ IS A JAITE HEAVY
- ★ DUTY MULTI-WALL
- ★ PAPER BAG

Jaite Heavy Duty Multi-Wall Paper Bags  
Offers Dependable Protection For  
**YOUR FERTILIZER**

Jaite Bags are made out of Super-Quality "Multi-Wall" Kraft Paper, including Moisture-Proof Sheets when necessary. In Sewn or Pasted Types.

**THE JAITE COMPANY**  
MANUFACTURERS OF PAPER AND PAPER BAGS  
**JAITE, OHIO**

SINCE 1905

Published every other Saturday. Annual subscription: In the United States, \$3.00; Canada and Mexico, \$4.00; other countries, \$5.00. Entered as second-class matter, January 15, 1910, at the Post Office at Philadelphia, Pa., under Act of March 3, 1879. Registered in United States Patent Office. Publication office, 1330 Vine St., Phila., Pa.

*print your*

# FERTILIZER BAGS

*more  
attractively*

This new 1945 Model Bag Printer will print any size or type of bag made of paper, burlap, cotton or paper-lined material. It is built in one, two and three colors.

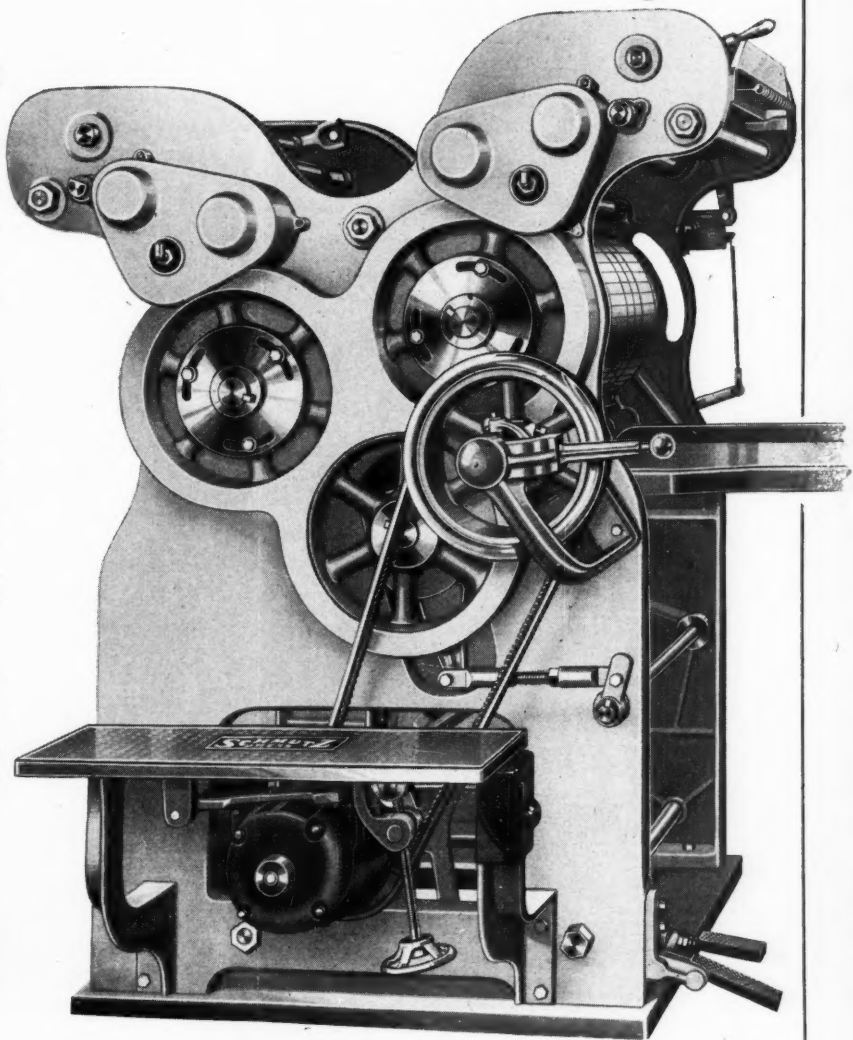
The highest type of printing can be done with this machine at the lowest possible cost. It will also do an excellent job of printing on used bags.

We are in a position to make prompt delivery on printing plates also printing inks for the Fertilizer industry.

**SCHMUTZ**  
MFG. CO.  
INCORPORATED

18th and Main Streets  
Zone 3

Louisville, Ky.



MANUFACTURED IN TWO AND THREE COLORS

CABLE ADDRESS "SCHMUTZ" ♦ LONG DISTANCE PHONE JACKSON 5219

## Keyed SERVICE!

Fertilizer plants all over the country—large and small—state their needs and we meet them. Large stocks of seasoned materials and ample modern production facilities enable us to make prompt shipments.

## TRIPLE SUPERPHOSPHATE

46 to 48% Available Phosphoric Acid

We also manufacture  
**HIGH-GRADE SUPERPHOSPHATE**

**U. S. Phosphoric Products**

Division  
**TENNESSEE CORPORATION**

Tampa, Florida

New York Office:  
61 Broadway  
Washington, D. C.  
440 The Woodward Bldg.

Sales Agents:  
Bradley & Baker  
155 East 44th St.  
New York, N. Y.

A Mark of



Reliability

## ALEX. M. McIVER & SON

*Official Brokers for*

**MILORGANITE**

*Specializing*

Nitrogenous Materials

Blood and Fertilizer Tankage

Phosphate Rock

Bone Meals

Manganese Sulphate

**SOUTH AMERICAN DRY  
RENDERED TANKAGE**

**PEOPLES OFFICE BUILDING  
Charleston, S. C.**



## AMERICAN POTASH and CHEMICAL CORPORATION

122 East 42nd St.

New York City

*Pioneer Producers of Muriate in America*

Branch Offices

214 Walton Building  
ATLANTA 3, GEORGIA

231 South La Salle Street  
CHICAGO 4, ILLINOIS

609 South Grand Avenue  
LOS ANGELES 14, CALIF.

## MURIATE and SULPHATE of POTASH

Plant foods are urgently needed to grow the crops which feed our nation and our armed forces.

Our plant at Trona, Calif., is operating at capacity to provide supplies of these essential plant foods, and other materials needed in the national effort.

*Manufacturers of Three Elephant Borax and Boric Acid*

See page 29





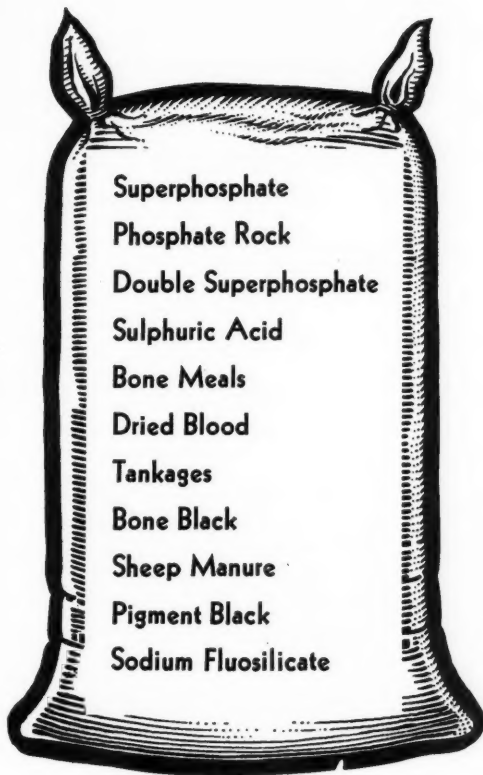


## ARMOUR FERTILIZER WORKS

General Offices:  
Hurt Building, Atlanta, Ga.

Mailing Address:  
P. O. Box 1685, Atlanta 1, Ga.

## FERTILIZER MATERIALS



### Division Sales Offices:

Albany, Ga.  
Atlanta, Ga.  
Augusta, Ga.  
Baltimore, Md.  
Birmingham, Ala.  
Chicago Heights, Ill.  
Cincinnati, Ohio

Montgomery, Ala.

Columbia, S. C.  
Columbus, Ga.  
East St. Louis, Ill.  
Greensboro, N. C.  
Havana, Cuba  
Houston, Texas  
Jacksonville, Fla.

Wilmington, N. C.

Nashville, Tenn.  
New Orleans, La.  
New York, N. Y.  
Norfolk, Va.  
Presque Isle, Me.  
San Juan, P. R.  
Sandusky, Ohio

# A Complete Service

**T**HE strategic factory locations of the American Agricultural Chemical Company, as shown on the accompanying map, assure prompt, dependable service for the complete line of products listed below.

We manufacture all grades of Commercial Fertilizers, Superphosphate, Agrinite Tankage, Bone Black, Bone Black Pigments (Cosmic Black), Dicalcium Phosphate, Monocalcium Phosphate, Gelatin, Agricultural Insecticides (including Pyrox, Arsenate of Lead, Calcium Arsenate, etc.), Trisodium and Disodium Phosphate, Phosphorus, Phosphoric Acid, Sulphuric Acid, Ammonium Fluosilicate, Magnesium Fluosilicate, Zinc Fluosilicate, Salt Cake; and we are importers and/or dealers in Nitrate of Soda, Cyanamid, Potash Salts, Sulphate of Ammonia, Raw Bone Meal, Steamed Bone Meal, Sheep and Goat Manure, Fish and Blood. We mine and sell all grades of Florida Pebble Phosphate Rock.



## FACTORIES

Alexandria, Va.	Cleveland, Ohio	No. Weymouth, Mass.
Baltimore, Md.	Detroit, Mich.	Pensacola, Fla.
Buffalo, N. Y.	Greensboro, N. C.	Pierce, Fla.
Cartaret, N. J.	Havana, Cuba	Port Hope, Ont., Can.
Cayce, S. C.	Henderson, N. C.	Savannah, Ga.
Chambly Canton, Quebec, Can.	Montgomery, Ala.	Searsport, Maine
Charleston, S. C.	Nat. Stockyards, Ill.	South Amboy, N. J.
Cincinnati, Ohio	Norfolk, Va.	Spartanburg, S. C.
		Wilmington, N. C.

## The AMERICAN AGRICULTURAL CHEMICAL Co.

50 Church Street, New York 7, N. Y.

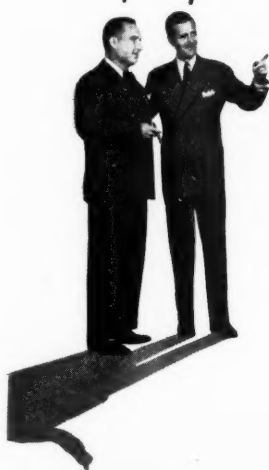
## SALES OFFICES

Alexandria, Va.	Columbia, S. C.	Montgomery, Ala.	Pierce, Fla.
Baltimore, Md.	Detroit, Mich.	Montreal, Quebec, Can.	Port Hope, Ont., Can.
Buffalo, N. Y.	Greensboro, N. C.	National Stockyards, Ill.	Savannah, Ga.
Cartaret, N. J.	Havana, Cuba	New York, N. Y.	Spartanburg, S. C.
Charleston, S. C.	Henderson, N. C.	Norfolk, Va.	Wilmington, N. C.
Cincinnati, Ohio	Houlton, Me.	No. Weymouth, Mass.	
Cleveland, Ohio	Laurel, Miss.	Pensacola, Fla.	



*"Just look at the locations of those six Bemis Multiwall plants!"*

*"Yes, that's another reason IT PAYS TO BE A BEMIS MULTIWALL PAPER SHIPPING SACK CUSTOMER!"*



The strategic locations of the six Bemis Multiwall plants mean quick service to all sections of the country. • And that's not all... working as a team, these plants support each other in filling the needs of Bemis customers. In emergencies, the plant with which an order is placed can depend on five other Bemis plants for assistance in meeting scheduled shipping dates. Such advantages are why folks say: • "It pays to be a Bemis Multiwall Paper Shipping Sack Customer."

## Bemis Multiwall Paper Shipping Sacks

Peoria, Ill.  
East Pepperell, Mass.

6 PLANTS

Mobile, Ala.

San Francisco, Calif.

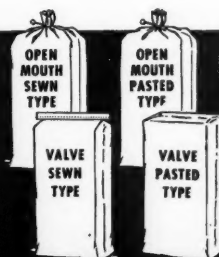
Wilmington, Calif.  
St. Helens, Ore.

**BEMIS BRO. BAG CO.**

OFFICES: Baltimore • Boston • Brooklyn  
Buffalo • Charlotte • Chicago • Denver  
Detroit • East Pepperell • Houston • Indian-  
apolis • Kansas City • Los Angeles • Louis-  
ville • Memphis • Minneapolis • Mobile



New Orleans • New York City • Norfolk  
Oklahoma City • Omaha • Orlando  
Peoria • St. Helens, Ore. • St. Louis • Salina  
Salt Lake City • San Francisco • Seattle  
Wichita • Wilmington, Calif.



# 75<sup>th</sup> ANNIVERSARY

MAKING GOOD BAGS  
FOR THE PRODUCTS  
OF THE NATION



## Fulton Quality Bags



### Fulton Bag & Cotton Mills

Manufacturers Since 1870

ATLANTA  
NEW YORK

ST. LOUIS  
NEW ORLEANS

DALLAS  
DENVER

MINNEAPOLIS  
KANSAS CITY, KANSAS

...THE...

# AMERICAN FERTILIZER

"That man is a benefactor to his race who makes two blades of grass to grow where but one grew before."

Vol. 103

DECEMBER 1, 1945

No. 11

## APPRAISAL

By M. H. LOCKWOOD

*Eastern States Farmers' Exchange, and Chairman of the Board of Directors,  
The National Fertilizer Association*



M. H. LOCKWOOD, Chairman of the Board of Directors, of the National Fertilizer Association, is head of the Fertilizer Division of Eastern Farmers' Exchange, one of the leading farmers' cooperatives in the country. His service to the industry through the Association's activities covers many years

**F**EW of us would choose to turn back to the "good old days" as long as the impelling forces behind change are those checks and balances which make for a better democracy. We revolt against government intrusion in business because we believe that would mean an unbalanced economy in which true merit would have little chance and fair competition would be impractical. Indeed, we feel certain that such government intrusion would be a move toward state socialism which our Nation and its Allies have just finished stupendous military campaigns to end. With major military activities completed and wartime restrictions in process of removal, we may well take stock, look ahead cheerfully and aim high.

War Production Board orders covering the allocation of fertilizer materials among the many industry units, and the War Food Order directing distribution of fertilizers by the industry to consumers have been revoked. Because of the protein feed shortage and some question for the near future concerning supply and demand balance, the oilseed

meal order of the Department of Agriculture and the Price Orders still remain in effect. We welcome release from unnecessary restrictions, but we shall of course continue our cooperation in maintaining needed controls during the transition to peace.

In a voluntary trade association like ours, we have many different individual or organization ideas.

That is a healthy foundation for a sound program, providing we sort out our common interests in a spirit of constructive tolerance and exercise good judgment in collective activities.

For more than a year, travel restrictions have prevented us from gathering normally as we are here today. For more than two years, your representatives on the Board and Executive Committee have met and acted to bring about those changes which appeared of first importance to make this Association more effective in carrying forward sound projects at a reasonable cost to you. The revision of our by-laws, effected at the annual meeting last May, eliminated those few projects which had outlived their usefulness, and realigned the staff and board offices to better serve you.

Believing that small committees working on special assignments would prove effective, your Board is organized on that plan. Those committees have been and are working actively on various policy duties. The spirit with which committee assignments have been accepted and are being followed through is matched only by the diligence with which your Association staff has carried on their



more-than-full-time tasks. We realize that these are difficult times. But the very complexity of the problems we face is a challenge which has stimulated activity of a type which has been reassuring.

Your Association currently has two committees which purposely differ from those of the Board. These are the technical committees of (1) Chemical Control and (2) Plant Food Research. The first of these will meet here this afternoon and the second is to meet at an early date and will have other meetings during the year. Each of these committees has projects to tackle about which I am sure you will prefer to hear as they develop. Before leaving the subject of these committees, however, I believe we should remind ourselves that they perform a valuable service for our industry in our relations with control officials and agronomists, and to the benefit of the fertilizer consumers we serve.

Recalling some of the past activities of the Plant Food Research Committee, I think

The third is the *correlation of research on peanut fertilization* here in the Southeast. At its start, this project was just about as impossible in appearance as the soybean question looks today. While on peanut fertilization, of course, there is still much to be learned, at least, some order has been established in a field that earlier was, to say the least, confused.

The fourth is *corn* on which the Midwest first and more recently the South are making remarkable strides. Doctor Cummings will tell you later this morning of some of the more recent work on corn here in the Southeast. Those of us who took part in the beginning of this project some years ago remember well the skepticism with which it was viewed by some, and note with approval the progress made.

Still other projects such as correlating research results of fruit fertilization should be included were we to report on even the more important tasks this committee has tackled.



J. C. Huie, International Minerals & Chemical Corp.; L. D. Hand, Pelham Phosphate Co.; J. Rucker McCarty, International Minerals & Chemical Corp.



J. D. Dawson, Fidelity Chemical Corp.; J. J. Moore, Southern Cotton Oil Co.; Leon H. Davis, Southern Cotton Oil Co.; A. D. Kin-kaid, Southern Cotton Oil Co.

of four important projects on which substantial contributions have been made in a way which has affected and will continue to affect fertilizer use soundly.

The first of these is *grassland improvement* about which you will hear more at this meeting from Mr. Lush. Long as that project has been under way, its possibilities are, as yet, only partly appreciated, and its importance in sound agriculture as well as to this industry is not yet measured.

The second is that almost imponderable question of *so beans in the Midwest*, and how they or their rotation may best be fertilized. A start only has been made on that project. I am sure that your Plant Food Research Committee can contribute much to its sound solution

In stressing this particular committee, I should point out that the committee itself makes no pretense of being responsible for the many ramifications of research by the state and federal research units involved, or the several fertilizer material producers, all of whom have filled important places with and beyond the sphere of the committee itself. On the other hand, the committee has an important place in starting such projects and correlating the results.

This phase of our Association program has purposely been treated at length. If we are interested in soundly participating in usage promotion for our products, there is no more effective manner to accomplish that end. To do that job right, much of the research will

(Continued on page 20)

# The N. F. A. Public Relations Program\*

By C. T. PRINDEVILLE

*Vice-President, Swift and Company, and Chairman, Public Relations Committee,  
The National Fertilizer Association*



C. T. PRINDEVILLE, Chairman of the Public Relations Committee of the National Fertilizer Association, is Vice-President of Swift & Company. Under his direction this important branch of the Association's activities has expanded to tell more fully the industry's story to the American public

**A**T THE annual meeting in Washington last May, your Directors voted a budget for public relations and instructed the Public Relations Committee to get under way promptly with a program. Our immediate problem, I think you will agree, was to tell quickly the story of the industry and of the impending legislation which, if passed, would put the federal government into our business as a competitor with little concern as to costs or losses. This story had to be told to our publics, and I use the plural because, in addition to the general public and its elected representatives, our industry has three special publics: industry members and their employes (especially salesmen), our fertilizer agents and dealers, and farmers who use fertilizers.

Our theme in opposition to the Hill-Bankhead-Flannagan bills has four arguments directed to the issues which are paramount in the bills:

**First, capacity.** The private fertilizer manufacturers, including the cooperatives, have always maintained capacity in excess of the farmers' requirements except during the war in some of the newer areas of consumption, and even in those areas the existing plants could not run to full capacity on account of the shortage of raw materials, transportation, and labor. Since the beginning of the war, in spite of construction difficulties and prohibitions, at least 25 new plants have been

built or are in process of being built, and most of these are in the newer consuming areas. It seems assured that there will be ample capacity in normal times for all the fertilizer that anyone wants to buy.

**Second, price.** According to latest Department of Agriculture figures, the prices farmers receive for all their products have increased 98 per cent since the base period, 1910-14, and the prices they pay for all things they buy have increased 80 per cent, but fertilizer prices have increased only 21 per cent. Profits have also been relatively low, as evidenced by a report of the U. S. Bureau of Internal Revenue that for the fourteen years, 1927-40, all fertilizer companies filing Federal Income Tax Returns netted less than a cent per dollar of gross sales.

**Third, quality.** There is a feeling in some quarters that fertilizer manufacturers want to sell low grades. Actually, in this business as in most others, there is less profit in low-grade goods than in high-grade goods. As a result of educational work carried on over a long period of time by the federal government, the States, and the various scientific societies (with all of whom the fertilizer industry has cooperated closely), the average plant food content of fertilizer increased from 13.9 per cent in 1920 to 21.0 per cent in 1944. I am sure this trend will continue.

**Fourth, government in business.** Government operation would be a burden upon the taxpayer, and in view of the facts regarding capacity, prices, and quality, this burden appears to be uncalled for. It might be the entering wedge for socialization of all essential industry.

It seemed to your committee that the quickest and most economical way of doing the job of telling this story to our several publics was to engage people who made a business of this sort of thing; so after considerable investigation, we retained Hill and Knowlton, and, having done so, made them familiar with our problem and then worked out a program with them. Mr. Lockwood's report of September 20th to you on "Your

\* A report made to the Fall Meeting of the National Fertilizer Association, Atlanta, Ga., November 13, 1945.

(Continued on page 22)

# The Fertilizer Materials Situation

By J. W. WIZEMAN

*Chief, Inorganics Branch, Civilian Production Administration*



J. W. WIZEMAN has been in Government service since 1924. Since 1941, as Chief of the Inorganics Chemicals Branch of WPB, and now as Chief of the Inorganics Branch, Chemical Division, CPA, he has had general supervision over the allocation of fertilizer materials and equipment priorities.

**N**OTWITHSTANDING temporary shortages of certain materials, inadequate labor, unsatisfactory transportation conditions, bag shortages, and the like, the war-time record of fertilizer production in the United States is outstanding. While many domestic farmers would have gladly purchased more fertilizer if materials had been available, a review of the over-all statistics shows a plant food production increase of 84 per cent during the war period.

This fine record of domestic accomplishment does not mean that we live in a world free of fertilizer supply problems. Global supplies are short and the deficiencies will hamper rehabilitation of agriculture in the war-torn areas during the coming season and possibly 1947. It has been roughly estimated that the current world shortage of nitrogen exceeds 300,000 tons annually, of phosphates, 500,000 tons  $P_2O_5$ , and of potash, 175,000 tons  $K_2O$  equivalent.

## World Nitrogen Shortage

In the case of nitrogen, a deficiency exists of almost 20 per cent. These estimates exclude Asiatic requirements which are chiefly for nitrogenous materials. The magnitude of the Asiatic deficiencies can be appreciated if it is recalled that the pre-war Japanese Empire had a nitrogen capacity of approximately 400,000 tons, whereof a large share

of the output was required for home consumption. The permanent cure for a shortage is to raise output. There is idle nitrogen capacity in Europe but nitrogen plants need coal, and coal is the Number One priority problem in Europe. First consideration for the coming winter season will be to provide fuel for keeping the population from freezing. At the close of the winter period it will be too late to accumulate adequate nitrogen supplies for the 1946 crop year. It may be recalled that following World War I, Germany was obligated to deliver under reparations account, far in excess of 20 million tons of coal annually to Allied countries starting in 1919.

## World Potash Shortage

Percentage-wise, a world potash shortage of under 10 per cent is smaller than that of nitrogen and phosphates. Here again, coal is required for production for mining and refining operations. The outlook for German exports to liberated Europe is discouraging. The mines are located in the American, British and Russian zones of occupation, with the bulk of the potential output concentrated in the Russian zone. Fast action will be required by the respective governments in control of Germany if potash is to be made available in Europe in time to be of value for the 1946 growing season.

## World Phosphate Shortage

Little immediate relief is in sight for meeting the world phosphate deficiency of 10 to 15 per cent. As in the case of nitrogen, the coal supply problem is a limiting factor in the North African phosphate fields. While North Africa is behind schedule on exports, the trend of deliveries has improved in recent months. Deliveries of rock from Nauru and Oceania at about pre-war levels may be delayed 18 months to replace loading gear damaged by the Japanese early in the war.

## Nitrogen in the U. S.

Immediately upon the capitulation of Japan, a drastic cut was made in the United

\*Portion of an address at the Fall Meeting of the National Fertilizer Association, Atlanta, Ga., November 13, 1945.

States explosives production schedules. Ammonia stocks, then approximately 40,000 tons, could be increased by 2,000 tons daily. Thus, Ordnance was forced to consider cessation of production or arrange for non-military outlets. The Jayhawk plant at Baxter Springs, Kansas, and the Ozark plant at El Dorado, Arkansas, at the request of the Director of War Mobilization and Reconversion, were requested to produce 22,000 tons monthly of ammonium nitrate water solution for shipment to loading plants for conversion to the solid agricultural nitrate form in order to take care of UNRRA and other foreign shipments. The Buckeye plant at South Point, Ohio, was leased by Allied Chemical and Dye Corporation for the production of ammonia and fertilizer nitrogen solutions under the supervision of RFC to which all Ordnance plants, with the exception of Morgantown, W. Va., were transferred. It is understood that the disposition and

After considerable opposition on the part of consumers, ammonium nitrate won acceptance as a new fertilizer material in American agriculture. Disappointments with respect to initial shipments were due to poor physical condition, but with improved processing and bags, the value of the new fertilizer was appreciated and requirements for many months during the war period were far in excess of the available supply of both Canadian and American production. Another significant war-time development was the maximum acceptance of ammonia and ammonium nitrate solutions for ammoniating superphosphate.

Concurrent with increases in domestic capacity to produce nitrogen, Canada installed plants with an annual capacity of 136,000 tons nitrogen as a contingency for Great Britain in the advent of possible loss of Billingham and other British nitrogen plants programmed for the United Kingdom



Conventioners of the Barrett Division, Allied Chemical & Dye Corp.: E. W. Harvey, Roy S. Marsden, W. H. Mortimer, F. T. Techter, C. J. Ball



Mrs. Franklin Farley; Ray L. King, Georgia Fertilizer Co.; Susanne Farley; R. F. Fraser, Ashcraft-Wilkinson Co.; Franklin Farley, International Minerals & Chemical Corp.

utilization of these plants now rest with RFC, which is making a study of the disposition of excess Ordnance plants, except the Cactus works at Etter, Texas. It is said that the Bureau of Mines is endeavoring to obtain one of the idle ammonia government plants for experimental research in the field of motor fuels. RFC may scrap Cactus because of its location with regard to peace-time operation.

The Ordnance plants were designed to meet a military requirement and their effective utilization will, in some instances, necessitate the provision of finishing equipment to convert the primary production of ammonia to solid forms of fertilizer materials suitable for economic handling.

explosives production requirements. There was substantially no interference to British production throughout the war period and as a consequence, Canada was able early to convert a large share of its government ammonia capacity to fertilizer use. Present plans envisage delivery of 120,000 tons of ammonium nitrate during the current season for use in the areas north of Georgia and east of the Rocky Mountains, in the West Coast States, and Hawaii. Because fertilizer materials enter United States free of import duty, and since Canadian government plants are efficient low-cost producers, it will be necessary to keep Canadian production in our over-all nitrogen supply considerations for 1946 and possibly for many years to come.

(Continued on page 24)



## THE AMERICAN FERTILIZER

ESTABLISHED 1894

PUBLISHED EVERY OTHER SATURDAY BY

WARE BROS. COMPANY

1330 VINE STREET, PHILADELPHIA 7, PA.

A Magazine international in scope and circulation devoted exclusively to the Commercial Fertilizer Industry and its Allied Industries

PIONEER JOURNAL OF THE FERTILIZER INDUSTRY

A. A. WARE, Editor

C. A. WHITTLE, Associate Editor

K. F. WARE, Advertising Manager

E. A. HUNTER, Southern Advertising Manager

2246 E. Lake Road, N. E.,

Atlanta, Ga.

### REPRESENTATIVES

WILLIAM G. CAMPBELL

123 W. Madison St., Chicago, Ill., Phone—Randolph 4780

ROY M. McDONALD

564 Market St., San Francisco, Calif., Phone—Garfield 8966

541 S. Spring St., Los Angeles, Calif., Phone—Tucker 7981

### ANNUAL SUBSCRIPTION RATES

U. S. and its possessions, also Cuba and Panama.....	\$3.00
Canada and Mexico.....	4.00
Other Foreign Countries.....	5.00
Single Copy.....	.25
Back Numbers.....	.50

THE AMERICAN FERTILIZER is not necessarily in accord with opinions expressed in contributed articles that appear in its columns. Copyright, 1945, by Ware Bros. Company.

Vol. 103      DECEMBER 1, 1945      No. 11

## Principal Articles in This Issue

APPRAISAL, by M. H. Lockwood.....	9
THE N. F. A. PUBLIC RELATIONS PROGRAM, by C. T. Prindeville.....	11
THE FERTILIZER MATERIALS SITUATION, by J. W. Wizeman.....	12
Convention Gossip.....	14
Convention Attendance.....	16
FERTILIZER MATERIALS MARKET:	
New York.....	17
Chicago.....	17
Charleston.....	17
Readjustments in Agriculture.....	28

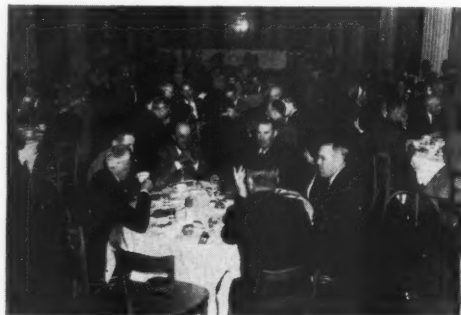
## Convention Gossip

Well, let's start at the beginning of things and carry through to the final bell. We will ask you to bear along at certain spots, as it would seem that we got caught in a revolving door.

One could tell reconversion was well under way—the train pulled in at Atlanta on time, that is, it was on time at the Peachtree Station; there is no guarantee when it arrived at the downtown station. By the way, how is it that so many people get off at the Peachtree Station? There is never a taxi around. One of the natives said he saw one there the week before. At this we got out the program and found the convention lasted only three days—so waiting for a cab was out of all question. By gosh, as luck would have it, Good Samaritan George Suggs of Barrett came to bat and offered a helping hand. Can you imagine a fellow bolting his eggs down at the crack of dawn just to be on hand when the train arrived? Wonder if he would have done it if gas was still rationed—bet he would; just reminds you of that sort of a guy.

You have got to hand it to those Atlantans, they turned on a beautiful piece of weather for a convention. It was made to order—just warm enough to go around without a topcoat.

After checking in the hotel and bedding down for the three day stay, it took only a few minutes to learn that Monday was "Suppliers Day." There seemed to be two suppliers for every foot of lobby space. Funny how those competitors got together and talked with each other as if they were friends. They went around patting each other on the back very friendly like. (Could it be that they were feeling around for a



The Annual Fall Banquet of the National Fertilizer Association



soft spot to stick the dagger the following week?) This "palsy-walsy" gesture took place pretty much all through the day. Somewhere along the line, news got around that one of the boys—not a supplier—must have struck pay-dirt this year. He had a case of Scotch in his room. This word "Scotch" seemed to have a tremendous charm. You could hear a group say, "So-and-so has a case of Scotch." Then an echo from another group—"Did you know so-and-so has a case of Scotch?" (We don't know what this magic word "Scotch" means, but suppose you fellows in the fertilizer business do, or could it be some sort of a password?)

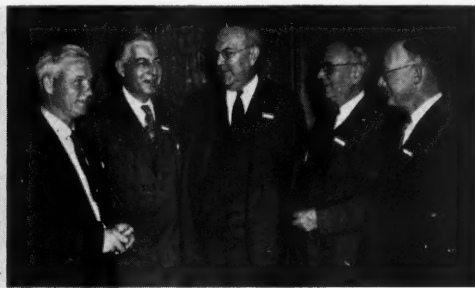
By the way, who were those eleven fellows and one girl that went out of the hotel Monday evening? Heard one of them say he was having "a condemned good time." Well, it sounded as if he said "condemned"

The meeting was called for 10:00 A. M., and everyone showed up promptly. Never saw anything like it. The first speaker was J. W. Wizeman, Chief, Organics Branch, Chemicals Division, Civilian Production Administration, Washington, D. C. Next was Doc Cummings, from North Carolina Agricultural Station, and he had plenty on the ball. If you are anywhere around when he gives a talk, don't miss it. He had excellent facts on nitrogen and backed them up with slides. When he finished talking, you felt like going home and throwing away your vitamin pills and taking nitrogen instead.

Incidentally, have you ever been called on to give a talk before a large group and then have that funny feeling sneak up on you? Well, don't feel badly any more. It must happen to the best of us, and here is our logical reason. We noticed one of the speakers coming out of the men's room



H. B. Baylor, International Minerals & Chemical Corp.; M. H. Lockwood, Eastern States Farmers' Exchange; Hugh M. Comer, Avondale Mills; G. T. Prindville, Swift & Co.



Henry L. Taylor, Sr., Barrett Div., Allied Chemical & Dye Corp.; J. H. Wizeman, Civilian Production Administration; F. S. Lodge, National Fertilizer Association; Hugh Craig, "Oil, Paint & Drug Reporter"; Philip McG. Shuey, Shuey & Co.

or was it a matter of not getting the proper coordination from his tongue?

Everything was quiet through the evening, with the exception of Bill Chace of Hill & Knowlton, née National Fertilizer Association. Thought for a while Bill was going to blow a fuse over his excitement of not getting certain folders by plane from Washington. When we heard planes were being grounded at Washington, it only added greatly to his discomfort.

Tuesday morning everyone seemed ready to settle down to the business at hand. One of the first of this august group we ran into was pessimist Phil Shuey. Why do we call him pessimist? Well, when a fellow has no confidence in just a belt, but also wears suspenders with it, he must be a pessimist.

just before he spoke. Just think, such a prank from one who was going to speak on Public Relations.

The banquet on Tuesday evening was everything one could hope for. Nicely arranged meal and entertainment, although we kind of imagined the black-faced comedians' stuff didn't go too well with some of the ladies. For that matter, it might not have struck some of the male members too pleasantly.

The outstanding speaker on Wednesday's program was one Hugh N. Comer, President-Treasurer of the Avondale Mills at Sylacauga, Alabama. If we all could go through life with our humor running rampant such as

(Continued on page 30)

## Convention Attendance

Members and Guests Registered at the Fall Meeting of the National Fertilizer Association,  
Biltmore Hotel, Atlanta, Georgia, November 13 and 14, 1945

- Acree, R. M., Federal Chemical Co., Meridian, Miss.  
Alexander, E. D., Georgia Extension Service, Athens, Ga.  
Anthony, J. W., Farm Service, Inc., Opelousas, La.  
Appleby, Harry, Sylacauga Fertilizer Co., Sylacauga, Ala.  
Appleton, W. H., Potash Company of America, Montgomery, Ala.  
Applewhite, Walter, Synthetic Nitrogen Products, New York, N. Y.  
Arledge, C. C., Armour Fertilizer Works, Atlanta, Ga.  
Arnold, H. H., H. M. Arnold Fertilizer Company, Monroe, Ga.  
Asbell, J. E. B., Producers Supply, Inc., Palmetto, Fla.  
Ashcraft, Robert E., Ashcraft-Wilkinson Co., Norfolk, Va.  
Ball, C. J., Barrett Division, Norfolk, Va.  
Barnes, J. E., U. S. Potash Co., New York, N. Y.  
Baskin, J. L., International Minerals & Chemical Corp., Orlando, Fla.  
Baughaum, W. L., International Minerals & Chemical Corp., East Point, Ga.  
Baylor, H. B., International Minerals & Chemical Corp., Chicago, Ill.  
Beatty, R. D., Dolcito Quarry Company, Birmingham, Ala.  
Penton, Jack F., Raymond Pulverizer Division, Chicago, Ill.  
Bonner, T. H., Chilean Nitrate Sales Corp., Atlanta, Ga.  
Boynton, L. R., U. S. Potash Company, Atlanta, Ga.  
Braden, R. C., Federal Chemical Co., Nashville, Tenn.  
Bridgers, F. N., Farmers Cotton Oil Co., Wilson, N. C.  
Bridgers, T. F., Farmers Cotton Oil Co., Wilson, N. C.  
Brinton, J. P., Hydrocarbon Products Co., Inc., New York, N. Y.  
Brown, Shelby, Bemis Bag Company, Mobile, Ala.  
Brooks, D. W., Cotton Producers Association, Atlanta, Ga.  
Burns, George N., Chase Bag Company, Toledo, O.  
Butt, C. A., International Minerals & Chemical Corp., East Point, Ga.  
Cameron, D. H., E. T. Allen Co., Atlanta, Ga.  
Cannon, C. H., SOWEGA Fertilizer Corp., Adel, Ga.  
Carpenter, A. H., Armour Fertilizer Works, Atlanta, Ga.

(Continued on page 30)



George W. McCarty, Ashcraft-Wilkinson Co.;  
F. S. Lodge, National Fertilizer Association



Weller Noble, Pacific Guano Co.; Robert S.  
Cope, Reliance Fertilizer Co.

### BRADLEY & BAKER

FERTILIZER MATERIALS - FEEDSTUFFS

AGENTS - IMPORTERS - BROKERS

155 E. 44th Street  
NEW YORK

Clinton St. & Danville Ave.  
Baltimore, Md.

BRANCHES  
505 Royster Building  
Norfolk, Va.

Barnett Bank Building  
Jacksonville, Fla.

504 Merchants Exchange Bldg., St. Louis, Mo.

## FERTILIZER MATERIALS MARKET

### NEW YORK

**Sulphate of Ammonia Output Expected to Show Decline for Current Year. No Change in Nitrate of Soda Prices. Organics Still Extremely Scarce. Contract Shipments Taking Superphosphate and Potash Outputs.**

*Exclusive Correspondence to "The American Fertilizer"*

NEW YORK, November 29, 1945.

#### **Sulphate of Ammonia**

Shipments on orders already booked are taking the entire current production. Some shipments are behind schedule and the outlook for the coming season seems to indicate a drop of about 15 per cent from the 1944-45 production. Producers are unable to accept new orders which are now in the market.

#### **Nitrate of Soda**

There seems to be an adequate supply of this material on hand or in prospect. Due to greatly increased shipments to Europe, imports of nitrate of soda will be considerably less than during the last fertilizer year. November prices for domestic material have been continued through December.

#### **Organic Ammoniates**

Packing house by-products are still far from sufficient to fill current demands. Very few offerings are reaching the market and these are quickly taken at ceiling prices.

#### **Superphosphate**

Mixers are taking all the superphosphate that the acidulators can produce. The output so far this year is somewhat greater than the same portion of 1944. Considerable demand for export material has developed. Concentrated superphosphate is in even a tighter situation than the standard grades, due to export contracts which take a large portion of the production.

#### **Phosphate Rock**

Current orders, both domestic and foreign, will consume about all the phosphate rock that can be produced for the coming season. Contract shipments are going through in large volume and producers are hoping that a labor shortage does not develop during the coming months.

#### **Potash**

There has been no increase in the production levels and consequently little prospect of producers accepting any additional orders for the 1945-46 season. Every fertilizer mixer expects to find use for every ton of potash contracted for and consequently there is no resale material on the market.

### CHICAGO

**Complete Lack of Fertilizer Organic Offerings Reported. Supplies Not Improved in Spite of Larger Livestock Receipts.**

*Exclusive Correspondence to "The American Fertilizer"*

CHICAGO, November 26, 1945.

The demand and supply situation remains tight in this market with but little indication of any easing in the near future. Practically a complete lack of offerings exists at present.

Demand for feed is unabated with many pleas urging shipments on old orders. Larger livestock receipts have not had much effect on accumulations.

Ceiling prices are:

High grade ground fertilizer tankage, \$3.85 to \$4.00 (\$4.68 to \$4.86 per unit N) and 10 cents; standard grades crushed feeding tankage, \$5.53 per unit ammonia (\$6.72 per unit N); blood, \$5.53 (\$6.72 per unit N); dry rendered tankage, \$1.25 per unit of protein, f. o. b. producing points.

### CHARLESTON

**Feed Market Taking All Available Supply of Organics. Decline in Sulphate of Ammonia Production Expected.**

*Exclusive Correspondence to "The American Fertilizer"*

CHARLESTON, November 26, 1945.

**Organics.**—The situation on this has become worse in the past few weeks. All organics are continuing extremely scarce and it is pretty evident that very little cotton-

**A Merry Christmas**

... and this year it will really be  
a Merry Christmas  
for what better expresses  
the spirit of Christmas  
than Peace?  
and the prospect of the most prosperous  
and truly joyous New Year  
in the history of our country.

*Season's Greetings*  
May Your Christmas  
Be Merry  
And Your New Year  
Bright and Joyous

*The Raymond Bag Company*  
*Middletown, Ohio*

seed meal will be available for fertilizer.

**Sulphate of Ammonia.**—Authorities now believe that the shortage in the present season's supply will be around 150,000 tons even if there isn't any interruption in the operation of the steel mills.

**Blood.**—A very few cars from time to time are being offered at \$5.53 per unit of ammonia (\$6.72 per unit N) f. o. b. Chicago and all are being absorbed in the feed market.

**Nitrate of Soda.**—Due to the quiet demand for agricultural use, the spot supply is sufficient to meet the immediate calls.

**Castor Pomace.**—The mills are operating in a very limited way and are behind deliveries on contracts already written.

### International Organizes Foreign Sales

International Minerals and Chemical Corporation has dispatched its phosphate division sales manager, Comm. George W. Moyers, to Europe for establishment of a foreign sales organization, according to a statement by President Louis Ware.

Comm. Moyers left New York November 14th for visits to England, France, Belgium and The Netherlands. The setting up of sales outlets in these countries will replace the ones suspended during the war. In addition, the Commander will survey markets and investigate phosphate changes in Europe since 1939.

Recent conferences with foreign bankers have convinced the corporation that financing of purchases in most European countries will pose no problem. Phosphate will enter Europe as fast as it can be mined and as ship bottoms become available.

"International intends to expand its phosphate division so it may improve soil wherever soil is cultivated. We intend to supply all comers, from the governments of the world

to the cabbage-patch farmer. People are hungry," Mr. Ware concluded, "and International intends playing its part by producing plant food to raise food crops."

### Vieweg Elected President of American Potash & Chemical Corp.

Frederick Vieweg, formerly vice-president of American Potash and Chemical Corporation in charge of West Coast operations, has been elected president of the company, according to an announcement by W. J. Froelich, chairman of the board. Mr. Vieweg succeeds F. C. Baker who was compelled to resign because of ill health following a recent operation.

Mr. Vieweg, who will continue to make his headquarters at the Los Angeles office of the company, has been associated with the organization since 1919, serving as manager of the plant at Trona, California, later as vice-president in charge of sales, and since 1941, as vice-president in charge of West Coast operations.

### Myers Joins Texas Gulf Sulphur Staff

Texas Gulf Sulphur Company announces the appointment of A. Nelson Myers to its sales staff as of January 1, 1946. Mr. Myers will make his headquarters at the New York office of the company at 75 East Forty-fifth Street, New York.

Mr. Myers recently resigned his position with the Chilean Nitrate Sales Corporation with whom he had been connected for the past five years. Prior to his employment by that company, he had served with various fertilizer companies in the South. Mr. Myers was born in Virginia and graduated from Davidson College in North Carolina.

Manufacturers' Sales Agents for **DOMESTIC**

**Sulphate of Ammonia**

Ammonia Liquor :: Anhydrous Ammonia

**HYDROCARBON PRODUCTS CO., INC.**

**500 Fifth Avenue, New York**



## APPRAISAL

(Continued from page 10)

be carried on by the several states and the divisions of the Department of Agriculture with which we have worked so compatibly for years. Our industry includes many able soil chemists and agronomists whose collective work on such a committee has been more effective than many of us realize. In the future, such a committee may well become an even more active force in our program.

Another of our special projects for this year is the moving picture relating soil fertility to animal and human welfare. Mr. Engle is putting in some effective work on that task as well as the Consumer Survey which, in normal times, would have been completed before this. We are glad to inform you that the Survey Report will soon be

plant additions. A recent tabulation of these, including some still planned, indicates that the industry responds promptly to such needs.

Obviously, phosphates were among the important requirements in such areas. Even with a large portion of our high-analysis phosphate production soundly assigned for export to our Allies under Lend-Lease, and acid supplies for phosphate processing limited by war demands, industry performed the miracle of exceeding all previous records during each of the war years. Just as many of us would have liked more beef, pork and bacon while the farmers of the nation were piling up new production records, so also did some fertilizer demand go unsatisfied while we attained new heights of production. Such is the basis for the uninformed or the prejudiced to clamor for a government crutch



A. Norman Into, International Minerals & Chemical Corp.; D. S. Murph, National Fertilizer Association



The Speaker strikes a humorous note at the Tuesday session

completed. The important part taken by industry staff members in making that Survey is a fine example of teamwork and self-help.

The war period brought out some new area needs to which our industry has responded and is responding admirably. The Midwest and the West Coast areas gained more rapidly in demand than could be filled by nearby facilities. Special allocations of materials were made to those areas. Still there was some unfilled demand. Small deficits of supply also occurred in other areas. With all the recognized handicaps of wartime construction, large, small, medium, corporate, cooperative and new as well as old factors in the industry jumped into the breach and, with the difficulties which those directly involved know best, built, equipped and finally put in operation a number of new plants and

with which to "save the fertility resources" of the nation. The chief justification of such forces seems to be that because, during the war, tax funds were tapped heavily to finance plants for war needs, the nation's taxpayers should be able to "spare a few millions a year to save our national soil fertility" through government production of fertilizers.

Such an uncourageous approach to an important problem would give many of us a laugh if we did not recognize the ugly implications it has in a complex civilization of which we are a part. Certainly private enterprise is imperfect, just as our modern democracies fall short of ideals. But the healthy effects of competitive enterprise outweigh the theoretical advantages of a paternalistic state. I have remarked several times in recent months that I wished the theorists who propose so easily the spending



**FARMERS NEED OTHER PROTECTION, TOO!**

**HIGRADE  
MURIATE OF POTASH  
62/63% K<sub>2</sub>O  
GRANULAR  
MURIATE OF POTASH  
48/52% K<sub>2</sub>O  
MANURE SALTS  
22/26% K<sub>2</sub>O**



Reg. U. S. Pat. Off.

A barn is vital protection to a farmer. It shelters his livestock in bad weather, keeps his hay dry, and guards his tools against rust.

But just as important to a farmer is the protection your fertilizers give his crops. Complete fertilizers contain potash — the

vital soil nutrient which protects crops against plant disease and drought, and guarantees greater soil fertility.

Sunshine State Potash has been an important aid in helping farmers produce above-average yields season after season.

**UNITED STATES POTASH COMPANY**

*Incorporated*

30 Rockefeller Plaza, New York 20, N. Y.



of public funds could have the experience of investing their own money in such projects and then making them pay their own way with no rich uncle standing by to bail them out.

Our best defense against misunderstandings on the part of others is obviously an aggressive program of informing the public constructively on the facts. As an industry, we have a record worthy of effective presentation. Our program for better public understanding is a good one. You are to have a full report of that program at this meeting. In order to make our public relations program most effective, we shall need both your patience and constructive participation.

You will be interested to know that your Association now has about 450 members. Also that plans are under way for our 1946 Annual Meeting to be held at French Lick Springs, Indiana, June 10, 11 and 12.

This brings me to the point of requesting your criticisms and suggestions. Your Association seeks your ideas. We may not find it practical to reflect all of your wishes, but as your policy delegates and employees, your Board and Staff welcome the strength your sorted ideas will give our group effort. We shall not attain perfection but we shall reach in its direction. The times ahead will measure our abilities as none yet lived. We face that future with confidence.



The Head Table at the Annual Banquet

### Glatz Promoted by Chase Bag

R. N. Connors, vice-president and general manager of Chase Bag Company, has announced the appointment of A. A. Glatz to the position of sales manager of the Chicago sales office, as well as sales manager of the Milwaukee branch.

Joining the Chase Company 23 years ago, Mr. Glatz has been connected for some time in the Chicago sales office, and during this time has had wide experience in the feed and produce fields. His headquarters will continue to be in the Chicago office.

### PUBLIC RELATIONS PROGRAM

(Continued from page 11)

Association's Public Relations Program" described in detail our objectives, what had been done and what is planned. I would like to touch on the high-spots of his report.

We have two main objectives, the first and immediate one being to defeat the Hill-Bankhead-Flannagan bills; the second, or long-term objective, being to bring the accomplishments of the fertilizer industry to favorable public attention, to correct any misunderstandings of the industry's structure and services, and to emphasize its real contributions to the country's welfare.

Toward the immediate objective, the NFA issued the Emergency Bulletin, with which you are familiar. It was accompanied by a letter with a suggested press release, and I am glad to say that our members and their agents and dealers followed through in good shape as we have received clippings of many favorable editorials and news stories.

The Emergency Bulletin, directed especially to the industry's more than 45,000 agents and dealers, was intended to give briefly the high-spots and the dangers in the proposed legislation.

Then, feeling that a more comprehensive statement of the Association's stand should be put into the hands of our members and their field representatives, we issued the Basic Statement. This is being circulated with letters not only to NFA members and non-members but to heads of civic and trade associations, heads of private industries, and people who are willing to speak publicly on our position.

To reinforce the written arguments against the bills, we decided to tell a pictorial story of the industry which you have received as a special number of *The Fertilizer Review*. It has been printed in such a way that manufacturers can send copies to their agents and dealers with their compliments, without *Fertilizer Review* identification.

In addition to these activities directed to our larger publics, we have recruited industry speakers who are ready and willing to speak in opposition to the bills, if necessary. The members have also been asked to tell the industry's story to their senators and congressmen. In order to build closer relations with the press, your Association gave a luncheon in connection with the last Directors' meeting to the Washington Press representatives, and has continued these friendly contacts.

(Continued on page 24)

## **Sacking and Weighing Equipment which has been built and improved in the Field**

Present day EXACT WEIGHT Sacking Scales are the result of constant field contact by our sales engineers as well as factory engineers. Every improvement, every new feature, is the result of actual working conditions in the mill not our factory alone. The feature of pedestal mounting (illustrated) was added to make installation easier and quicker as well as provide more floor space under the bag holder for conveyor belts. The revolving dial grew out of a Supt.'s suggestion for visibility from any angle. The famous lock-jaw bagholder was created for firmer bag holding . . . more speed. The dust exclusion dashpot solved sticking of scales . . . made for more trouble-free operation. All of these improvements have reduced sacking and weighing costs . . . increased sack yield from bulk . . . further assured profits. Years and years of research, both in the field and in the factory have been worthwhile. Here is weighing equipment that works and delivers. Write for the new 1945 sacking scale catalog.



Model  
2224

**SALES and SERVICE**  
*in all Principal Cities  
from Coast to Coast  
and Canada*

**INDUSTRIAL PRECISION**  
**Exact Weight Scales**

**THE EXACT WEIGHT SCALE COMPANY**

901 W. Fifth Avenue  
Dept. Oe

783 Yonge St.

Columbus 8, Ohio  
Toronto, Canada



As a long range objective after the bills have been defeated (which I believe they will be), we should tell the industry's story to our millions of farmer customers so that unwarranted political attacks will be discouraged at birth. The fact that fertilizer is a necessity for most farmers makes it a natural target for politicians seeking public favor. We are aware that our problems and objectives must constantly be kept before the public and not only at a time when we are facing a crisis. It is better to take preventive action than to be combating an attack which is well under way. The conclusion of your committee is that the industry should have a constant program of education and public relations directed toward the average farmer and voter to prove to him that the fertilizer industry is economically sound and socially desirable.

#### THE FERTILIZER MATERIALS SITUATION

(Continued from page 13)

Ammonium sulphate maintains its position as the principal solid nitrogenous fertilizer in American agriculture. The consumption in the fertilizer year 1944-45 approximated 900,000 tons. The over-all outlook for 1945-46 approximates only 750,000 tons. Ammonium sulphate in the United States is obtained largely as a co-product in the carbonization of coal and yields are subject to rate of coke production which in turn depends chiefly on steel mill activities. Other limiting factors at present are the recent coal strike, the repairs of worn-out equipment at coke ovens, and the reported inability to recruit adequate labor.

It is reported that domestic distributors of sodium nitrate have been loath to anticipate spring requirements, resulting in a storage problem at the Hopewell plant and ware-

houses. Because Chilean nitrate supplies for the United States for the fertilizer year 1945-46 will approximate only 650,000 tons and since Chile is committed heavily in Europe and Egypt for the remainder of its output, there is no foreseeable increase in Chilean supplies over the program figures. Distributors are urged to acquire quickly any available supplies needed for later use to prevent cutbacks in domestic production. It is currently established that total supplies of sodium nitrate will not exceed 75 per cent of 1944-45 deliveries to territories east of the Rockies.



The Convention Registrars: Ferol J. Wilcox, Swift & Co.; Eloise Nelson, International Minerals & Chemical Corp.

#### Phosphates in the U. S.

Because plant construction in the super-phosphate industry was held at bare minimums during the war period, the post-war capacity is only slightly higher than per-war levels. Major uncompleted construction at the end of hostilities was a triple-super-



Trade Mark Registered

## MAGNESIUM LIMESTONE

"It's a Dolomite"

**American Limestone Company**  
Knoxville, Tenn.



# FOR MAGNESIUM-DEFICIENT SOILS

Meet the growing need for  
water-soluble magnesium with



## SUL-PO-MAG

SUPPLIES QUICK-ACTING MAGNESIUM



Experience is revealing magnesium deficiencies in many soils; experiment is disclosing high efficiencies of magnesium with crops where this deficiency is found to exist. The growing recognition of the importance of this critical element suggests your use of water-soluble magnesium for your fertilizer mixtures or for direct application. You get it most economically in Sul-Po-Mag which is delivered in the form of clean, dry-crystals that are free-flowing and easy to handle.

**SUL-PO-MAG (WATER SOLUBLE  
SULPHATE OF POTASH MAGNESIA)  
MURIATE OF POTASH  
SULPHATE OF POTASH**



*International* **MINERALS & CHEMICAL CORPORATION**

GENERAL OFFICES: 20 NORTH WACKER DRIVE, CHICAGO 6

DISTRICT SALES OFFICES: 61 BROADWAY, NEW YORK, N. Y. • CHICAGO • VOLUNTEER BLDG., ATLANTA, GA.



phosphate plant at Pasadena (Houston), Texas. This plant is expected to attain capacity levels later in November and it is contemplated that substantially all of the triple-super output during the remainder of the season will be exported, principally to distress areas in Europe.

Relaxation of plant construction controls has freed some deferred superphosphate projects, located notably in the midwest areas. From a national standpoint, it can be stated that the supply position, insofar as superphosphate plant capacity is concerned, is adequate.

Reports indicate that output of phosphate rock will be at slightly higher levels than at present throughout the remainder of the 1945-46 season. Several producers are either contemplating or are in the process of opening new mines. Until these operations can be accomplished, no substantial increase in output can be realized. One mining company is experiencing considerable difficulty in obtaining equipment essential to completion of a new flotation plant. Delays in procurement of equipment are attributed in part to strikes in the steel industry. It is possible that these factors may project full realization of the expansion program into 1947.

However, notwithstanding planned increased capacity, a supply of phosphate rock to meet the combined domestic and export demand in 1945-46 and 1946-47 is questionable. Of the current demand for superphosphate, supported by the AAA program, continuous American producers will be hard put to supply the domestic demand, let alone the export demand. The American producers should be able to furnish rock for export in the interest of international unity, but the supply of rock for export in 1946 is far short of the minimum necessity figure.

With an assurance of a market for such increased capacity, it is felt that producers, especially those in Florida, could expand within a 12-month period to any capacity required.

#### Potash in the U. S.

The American potash industry was developed in the face of tough foreign competition. The mining and refining methods of the domestic potash companies are without question the most modern in the world, resulting in a minimum labor requirement and a high output per worker.

Requirements for potash for industrial uses increased more than threefold during the war, many of the uses being for direct or indirect military purposes. The leading

industrial uses for primary potassium chloride, broadly classified in order of importance, are: potassium hydroxide, aluminum and magnesium production, potassium nitrate, potassium carbonate, potassium chlorate and perchlorate, xanthates, zinc chromates and yellow pigments, heat treating and annealing salts, bichromate, chemicals for gas masks.

Although a substantial portion of the expanded war-time requirements were traceable to military uses, there were surprisingly few cancellations of orders for the chemical industry immediately following cessation of hostilities. Many new uses were developed during the war which, it is expected, will either expand or continue in substantial volume.

One of the unsolved problems which confronted the Board during the war period concerned the shortage of sulphate of potash. Some attempts were made to augment the supply by the use of potassium chloride in place of sodium chloride in Mannheim furnaces at the Louisville Neoprene plant. A trial operation did not prove successful. The Louisville furnaces had cast iron bottoms, brick arches and unplated plows. It appears that the operation can be carried on successfully in furnaces with brick bottoms, car-



## "JAY BEE"

MODEL W  
Direct Connected  
50 H.P. to 200 H.P.

### Puts Extra Peacetime Profits Into Your Plant

The greater need for peacetime crops requires speed-up in fertilizer production. "Jay Bee" grinds any material going into commercial fertilizers—fast, cool and uniform. Heavy all steel construction makes the "Jay Bee" Hammer Mill practically indestructible. Greatest capacity for H.P. used. Sizes and styles to meet every grinding requirement: 12 H.P. to 200 H.P. with belt, V-belt, and direct connected drives.

Write for complete details, prices, etc.  
State your grinding requirement, please.

**J. B. SEDBERRY, Inc.**

FRANKLIN, TENN.

UTICA, N. Y.



**BURLAP...COTTON**

*"used bags that look like new"*

### Quality-Service-Price

**Bags,  
Bagging,  
Burlap—**

The foundation of business is  
confidence, which springs from  
integrity, fair dealing, efficient  
service and mutual benefit.

New and Second-Hand



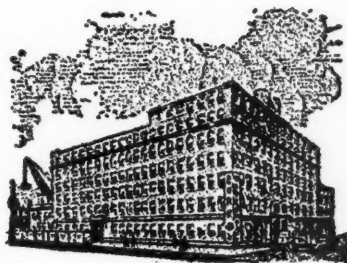
**Manufacturers—Dealers  
Importers—Exporters**

*Write—Wire—Phone*

**BURROS  
BAG COMPANY, INC.**

**PLYMOUTH AND ADAMS STREETS  
BROOKLYN 1, NEW YORK**

Telephones: Main 4-2424-5-6  
Cable "Burrosbag" New York



borundum arches and Duriron plated plows. Another attempt to expand production facilities in Texas involving private capital was abandoned in the summer of 1945, because of the contractor's inability to obtain satisfactory tax amortization privileges. Possibly some ingenious and economic method can be devised for taking care of this deficiency.

Because of the inability to obtain anticipated supplies for European destinations from the German potash mines, there is little likelihood of receiving any European potash in the United States during the remainder of this fertilizer year.

#### Sulphur in the U. S.

The war period amply demonstrated the ability of the American sulphur mining industry to meet on schedule every requirement of the military and essential civilian consumers. Current mining rates and stocks above ground are in a satisfactory condition. We are in the final phase of utilization in fertilizer manufacture of the sulphuric acid obtained as a by-product in the manufacture of munitions. Current residual supplies expected to be disposed of before January 1, 1946, approximate 40,000 tons of oleum to be denitrified and 30,000 tons of normal munitions spent acid, making a total of 70,000 tons sulphuric acid, basis 100 per cent. The drying-up of this source, which was so important to the superphosphate industry during the war, will necessitate some new production arrangements at certain plants but the over-all national sulphuric acid capacity is adequate for any visible requirement.

At the cessation of hostilities, the government-owned East Tennessee Ordnance works at Copper Hill, Tennessee, operated by the Tennessee Corporation, continued to serve the superphosphate trade approximately 700 tons daily of 60 degrees Baume acid, a quantity sufficient for production of 500,000 tons annually of normal superphosphate.

The present superphosphate outlook indicates that this plant must continue in full operation to supplement Tennessee's privately owned capacity at Copper Hill. The Copper Hill acid production feeds 75 superphosphate plants in ten southern states.

### Readjustments in Agriculture

Can farm production be maintained at a level well above the pre-war level and afterwards? Seeking an answer to this question, J. B. Hutson, Undersecretary of Agriculture and head of Production Marketing Administration, recently spoke before the Indiana Farm Bureau Federation.

Significant statements were: "While our total acreage of cropland has remained virtually constant during the war years, there have been substantial shifts in the production of some cash crops. Aside from favorable crop weather, crop yields have been increased in recent years because of conservation measures, increased use of fertilizers, and better varieties."

Viewing conditions he said: "I think it would be safe to count on production capacity for cash crops of some 20 per cent above that of pre-war years."

Concerning feed grains, he said it seems reasonable to conclude that production of feed crops could be maintained at a level about 25 per cent above the average of the 1935-39 pre-war period.

Livestock, including dairy products, poultry and eggs, he thought might well run 25 to 30 per cent above the pre-war level.

The basic answer to farm prosperity, he correctly states, is found in high domestic consumption and a healthy export market. These conditions met, the market ahead for most farm products, he says, will approximate one-fourth above pre-war, or around the present capacity of production.

FOR A *Complete*  
Fertilizer  
add **ES-MIN-EL**  
**TENNESSEE CORPORATION**  
ATLANTA, GEORGIA

## STEDMAN FERTILIZER PLANT EQUIPMENT

Dependable for more than 50 Years

All-Steel  
Self-Contained  
Fertilizer  
Mixing Units  
Batch Mixers—  
Dry Batching

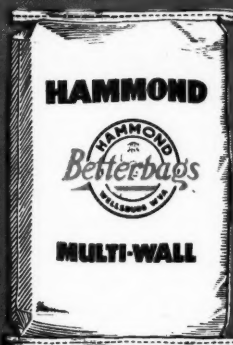
Pan Mixers—  
Wet Mixing  
Swing Hammer  
and Cage Type  
Tallings  
Pulverizers

Vibrating  
Screens  
Dust Weigh  
Hoppers  
Acid Weigh  
Scales

**STEDMAN'S** FOUNDRY & MACHINE WORKS  
AURORA, INDIANA, U.S.A. Founded 1874



*For BETTER PROTECTED  
FERTILIZERS... SELECT THE HAMMOND  
MULTI-WALL BAG THAT BEST MEETS  
YOUR REQUIREMENTS!*



**HAMMOND BAG & PAPER CO.**  
Paper Mill and Bag Factory: WELLSBURG, W. VA.

## SPECIFY THREE ELEPHANT



... WHEN BORON IS NEEDED TO CORRECT A DEFICIENCY OF THIS IMPORTANT SECONDARY ELEMENT

Agricultural authorities have shown that a lack of Boron in the soil can result in deficiency diseases which seriously impair the yield and quality of crops.

When Boron deficiencies are found, follow the recommendations of local County Agents or State Experiment Stations.

Information and references available on request.

**AMERICAN POTASH & CHEMICAL CORPORATION**

122 East 42nd ST., NEW YORK CITY

Pioneer Producers of Muriate of Potash in America

See Page 4





Currently the per capita domestic consumption is approximately 108 per cent of pre-war, which supplemented by military takings of 3 to 5 per cent of production, would require 88 per cent of our farm output. This would leave about 12 per cent for export outlets, or about the percentage going into foreign shipments in 1945, which is in line with exports in the early 1920's after the first world war.

He stresses as the first and most important step, that the Nation have a business economy that is running at or near full employment.

Even with high domestic consumption levels and substantial exports, it will still be necessary for this country to adjust production of some commodities, making it necessary to be selective in choosing the kind of crops and livestock to be held at high production levels. Moderate production changes, he held, may be brought about by adjusting price supports within the limits open to administrative action.

The degree of readjustments, as may easily be seen from Mr. Hutson's statement, will depend upon the purchasing power of the consuming public. Just now Mr. Hutson's prediction of maintained production is predicated upon a reasonable assumption that consumers will have a chance to buy goods and keep up employment, but it is equally apparent that if strikes do not cease and a flow of goods to consumers is not maintained, consumption will lag along with production.

#### CONVENTION GOSSIP

(Continued from page 15)

his, what a better place this world would be to live in. We are always envious of a fellow like Comer. He is the type who can get up before a group of serious-minded business men, and make them see the funny side of life, and at the same time, get across his message. If only our dentist could mete out such a painless treatment.

Finis was spelled at about 12:30 on Wednesday, and everyone promptly made a bolt for the first train out. That is, those who were fortunate enough to have an advance reservation.

So long, we'll be seeing you next June.

#### CONVENTION ATTENDANCE

(Continued from page 16)

- Carroll, H. L., International Minerals & Chemical Corp., Augusta, Ga.  
 Center, E. S., Jr., A & WP RR, Ga. RR, Western Ry. of Ala., Atlanta, Ga.  
 Chace, W. E., Hill & Knowlton, Washington, D. C.  
 Cocke, Emory, Ashcraft-Wilkinson Co., Atlanta, Ga.  
 Collins, W. O., University of Georgia, Athens, Ga.  
 Coltrane, D. S., N. C. Department of Agriculture, Raleigh, N. C.  
 Comer, Hugh M., Avondale Mills, Sylacauga, Ala.  
 Cooper, J. W., Swift & Co., Plant Food Division, Atlanta, Ga.  
 Cope, George E., Chatham Fertilizer Co., Savannah, Ga.  
 Cope, John L., Reliance Fertilizer Co., Savannah, Ga.  
 Cope, Robert S., Reliance Fertilizer Co., Savannah, Ga.  
 Coppinger, J. M., International Minerals & Chemical Corp., Chicago, Ill.  
 Crady, B. A., U. S. Potash Co., Meridian, Miss.  
 Crady, Marion W., duPont, Ammonia Dept., Memphis, Tenn.  
 Crady, Walter, North American Fertilizer Co., Louisville, Ky.  
 Craig, Hugh, *Oil, Paint & Drug Reporter*, New York, N. Y.  
 Crenshaw, Virginia, *Commercial Fertilizer*, Atlanta, Ga.  
 Crum, H. M., International Minerals & Chemical Corp., Raleigh, N. C.  
 Culpepper, Joe E., Synthetic Nitrogen Products Corp., Charlotte, N. C.  
 Culpepper, O. D., Swift & Co., Plant Food Division, Albany, Ga.  
 Cunningham, A. B., International Minerals & Chemical Corp., East Point, Ga.  
 Curtis, Augustus T., Maybank Fertilizer Corp., Charleston, S. C.  
 Curtis, T. B., C & WC Ry. Co., Atlanta, Ga.  
 Cushman, George, Long Island Produce & Fertilizer Co., Riverhead, L. I.  
 Dakin, E. F., Hill & Knowlton, New York, N. Y.  
 Dalton, William, National Association of Manufacturers, Atlanta, Ga.  
 Davies, Thos. W., Synthetic Nitrogen Products Corp., Columbia, S. C.  
 Davis, Leon H., Southern Cotton Oil Co., New Orleans, La.  
 Dawson, Jas. D., Jr., Fidelity Chem. Corp., Houston, Tex.  
 Dean, Jas. W., Knoxville Fertilizer Co., Knoxville, Tenn.  
 Dixon, O. A., International Minerals & Chemical Corp., East Point, Ga.  
 Dodd, Otho L., SCS, Commerce, Ga.  
 Dungan, D. C., Zenith Chemical Co., Salisbury, N. C.  
 Epting, J. H., Epting Distributing Co., Leesville, S. C.

Cable Address: CABESCAR

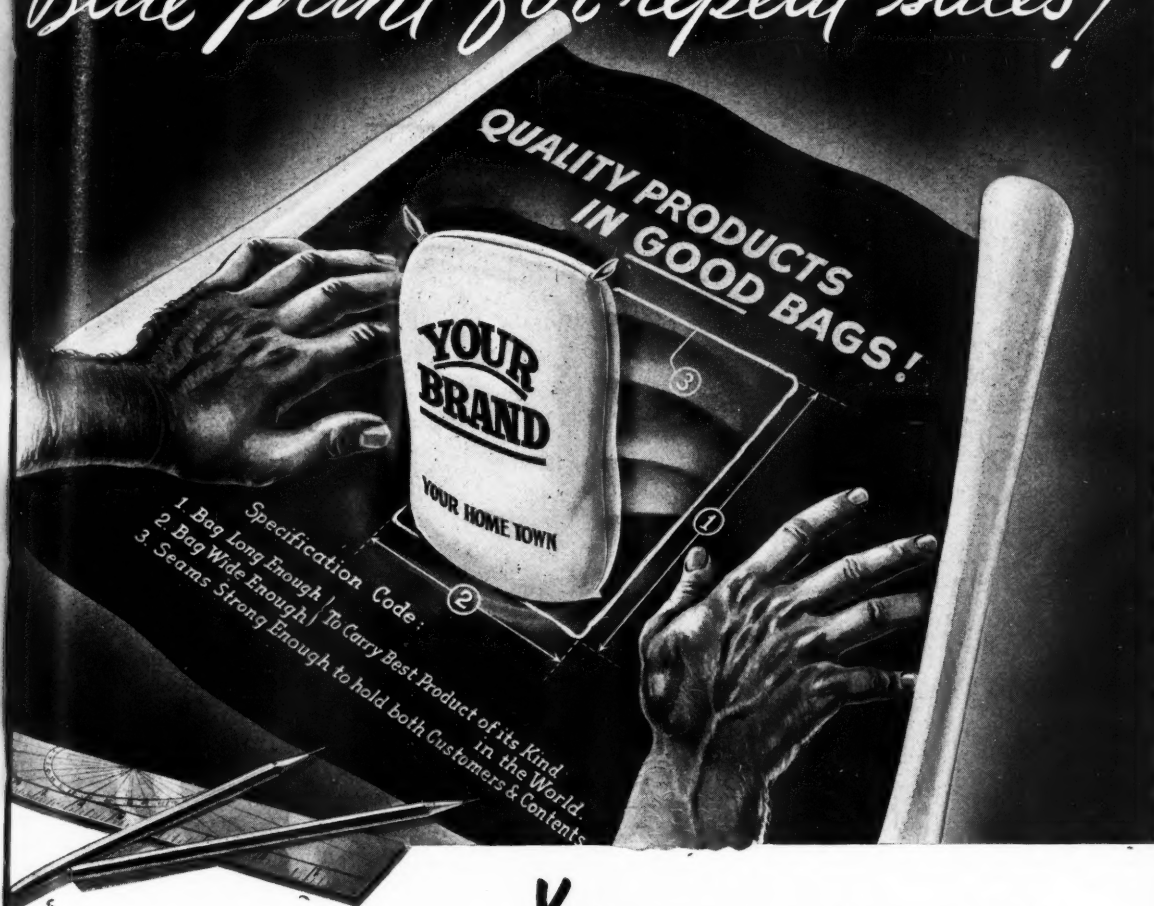
**SCAR-LIPMAN & CO., Inc.**

Domestic—Foreign

**FERTILIZER MATERIALS—CHEMICALS**

16 MELVILLE PLACE, IRVINGTON, N. J.

*Blue print for repeat sales!*



*You* won't be reconverted, come PEACE!

Fertilizer Manufacturers will have *all* their old customers plus *new* accounts. The dealers are impressed with your high quality products and timely deliveries. Identify yourself so distinctively that the public can ask for your products by name—come PEACE! For repeat sales, for better business tomorrow, pack your fertilizer in *MENTE'S GOOD BURLAP AND COTTON BAGS!*

**IT'S BETTER TO BUY BONDS THAN TO WEAR THEM!**

**MENTE & CO., INC.**

NEW ORLEANS

HOUSTON

I. T. Rhea, President and General Manager

SAVANNAH

Farley, Susanne, International Minerals & Chemical Corp., Chicago, Ill.  
 Farley, Mrs. Franklin, International Minerals & Chemical Corp., Chicago, Ill.  
 Farley, Franklin, International Minerals & Chemical Corp., Chicago, Ill.  
 Field, M. G., Meridian Fertilizer Factory, Hattiesburg, Miss.  
 Flowers, W. O., Federal Chemical Co., Louisville, Ky.  
 Ford, Burton A., St. Regis Paper Co., New York, N. Y.  
 Foss, G. A., Kelly-Weber & Co., Inc., Lake Charles, La.  
 Fraser, R. F., Ashcraft-Wilkinson Co., Charleston, S. C.

Gibson, J. M., Cotton Producers Assn., Atlanta, Ga.  
 Goodgame, Ray, Werthan Bag Corp., Birmingham, Ala.  
 Green, A. A., Jackson Fertilizer Co., Jackson, Miss.  
 Gunn, Watts, Chilean Nitrate Sales Corp., Atlanta, Ga.

Hackett, S. M., Federal Chemical Co., Shreveport, La.  
 Hallman, Martin R., Southern Cotton Oil Co., Montgomery, Ala.  
 Hand, L. D., Pelham Phosphate Co., Pelham, Ga.  
 Harmon, N. E., Meridian Fertilizer Factory, Hattiesburg, Miss.  
 Hartney, Marvin, International Minerals & Chemical Corp., Davisboro, Ga.  
 Harvey, E. W., Barrett Division, New York, N. Y.  
 Harvey, T. M., Southern Cotton Oil Co., Decatur, Ala.  
 Haynie, T. H., Fulton Bag & Cotton Mills, Atlanta, Ga.  
 Hedin, Erling A., duPont Co., Wilmington, Del.  
 Henderson, J. E., Jr., H. J. Baker & Bro., Savannah, Ga.  
 Hendricks, H. E., University of Tennessee, Knoxville, Tenn.  
 Hill, George B., Fulton Bag & Cotton Mills, Atlanta, Ga.  
 Holmes, Sanders, duPont Co., Wilmington, Del.  
 Holsombach, Harold D., Wetthan Bag Corp., Atlanta, Ga.  
 Hopkins, F. D., International Minerals & Chemical Corp., Atlanta, Ga.  
 Hough, T. V., Kershaw Oil Mill, Kershaw, S. C.  
 Howe, W. B., French Potash & Import Co., New York, N. Y.  
 Hudson, John R., Jr., Augusta Fertilizer Co., Augusta, Ga.  
 Hurston, F. W., Southern Cotton Oil Co., Cullman, Ala.  
 Huie, J. C., International Minerals & Chemical Corp., Albany, Ga.

Inglis, Hugh A., Georgia Extension Service, Athens, Ga.  
 Into, A. Norman, International Minerals & Chemical Corp., Chicago, Ill.

Jensen, Ove F., duPont Co., Chapel Hill, N. C.  
 Jones, Tom, Wertheimer Bag Co., Atlanta, Ga.

Keefin, C. C., St. Regis Paper Co., Chicago, Ill.  
 Kincaid, A. D., Southern Cotton Oil Co., Columbia, S. C.  
 King, Ray L., Georgia Fertilizer Co., Valdosta, Ga.  
 Koechlein, Fred A., International Minerals & Chemical Corp., Chicago, Ill.

Law, Thos. C., Law & Co., Atlanta, Ga.  
 LeRoy, W. E., Union Special Machine Co., Atlanta, Ga.  
 Lightfoot, C. E., Potash Company of America, New York, N. Y.  
 Lockwood, Maurice H., Eastern States Farmers' Exch., W. Springfield, Mass.  
 Lodge, F. S., National Fertilizer Assn., Washington, D. C.  
 Lott, Warren, Blackshear Mfg. Co., Blackshear, Ga.  
 Lush, R. H., National Fertilizer Assn., Washington, D. C.

Magee, T. F., American Shipping & Stevedoring Co., Savannah, Ga.  
 Magee, Mrs. T. F., American Shipping & Stevedoring Co., Savannah, Ga.  
 Magee, J. J., American Shipping & Stevedoring Co., Savannah, Ga.  
 Mann, H. B., American Potash Institute, Atlanta, Ga.  
 Marsden, Roy S., Barrett Div., New York, N. Y.  
 Martin, C. R., Miami Fertilizer Co., Dayton, O.  
 Martin, J. T., Shellman Home Mixture Guano Co., Shellman, Ga.  
 Matthews, W. E., Chilean Nitrate Sales Corp., Atlanta, Ga.  
 Means, Avery, Commercial Fertilizer Magazine, Atlanta, Ga.  
 Meguschar, B. E., International Minerals & Chemical Corp., Chicago, Ill.  
 Miller, A. F., Swift & Co., Plant Food Div., Chicago, Ill.  
 Miller, John A., Price Chemical Co., Louisville, Ky.  
 Miller, J. C., Miller Bros. Co., Jefferson, S. C.  
 Mitchell, A. D., Tuskegee Oil & Fertilizer Co., Tuskegee, Ala.  
 Mooar, John C., Sturtevant Mill Co., Boston, Mass.  
 Moore, Harry C., Armour Fertilizer Works, Atlanta, Ga.  
 Moore, J. J., Southern Cotton Oil Co., Atlanta, Ga.  
 Morgan, Irvin, Jr., Farmville Oil & Fertilizer Co., Farmville, N. C.  
 Mortimer, W. H., Barrett Division, New York, N. Y.  
 Morton, Cecil B., Jackson Fertilizer Co., Jackson, Miss.  
 Moses, J. E., National Cottonseed Production Assn., Atlanta, Ga.  
 Murph, Daniel S., National Fertilizer Assn., Washington, D. C.  
 Myers, J. R., Eastern States Farmers' Exchange, Cambridge, Mass.  
 Myers, N. C., Jr., Knoxville Fertilizer Co., Knoxville, Tenn.

MacInnes, A. R., Bemis Bro. Bag Co., Mobile, Ala.  
 McCarty, Geo. W., Ashcraft-Wilkinson Co., Atlanta, Ga.

**L. W. HUBER COMPANY**  
*Brokers Fertilizer Materials*  
 —Room 903—  
 170 BROADWAY  
 NEW YORK 7, N.Y.



### Just plain potatoes?

Well, yes. Go back, in your mind, to the spuds in the row. The quality is poor and the yield is low *unless* there's *nitrogen* to make them grow.

From Homestead, Florida, to Aroostook, Maine, experiment stations and years of commercial experience have shown that urea nitrogen is excellent for potatoes—and for most other crops as well. Urea nitrogen is completely available yet will resist leaching. Therefore, it feeds the crop over the entire growing period—especially important in later weeks when plant food intake is high.

Ammoniation with Urea-Ammonia Liquor is an important step in making fertilizers

that carry urea nitrogen. UAL is economical and it facilitates the "curing" of mixtures which store well and drill well.

To meet varying requirements, Du Pont offers 4 Urea-Ammonia Liquors and "Uramon" Fertilizer Compound. May we supply you with more information? E. I. du Pont de Nemours & Co. (Inc.), Ammonia Department, Wilmington, 98, Delaware.

**DU PONT**  
**UREA-AMMONIA**  
**LIQUORS**  
**URAMON\***

FERTILIZER COMPOUND



BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

REG. U. S. PAT. OFF.



- McCarty, J. Rucker, International Minerals & Chemical Corp., East Point, Ga.  
 McClellan, R. W., duPont Co., Wilmington, Del.  
 McConnell, Hoke, McConnell & Co., Royston, Ga.  
 McDonald, Mark A., Cotton Producers Assn., Atlanta, Ga.  
 McDonald, Mrs. Mark, Cotton Producers Assn., Atlanta, Ga.  
 McIntosh, Geo. S., Tennessee Valley Authority, Knoxville, Tenn.  
 McIver, Alex M., Alex M. McIver & Son, Charleston, S. C.  
 McMath, R. L., Jr., Americus Oil Co., Americus, Ga.  
 Nelson, Eloise, International Minerals & Chemical Corp., East Point, Ga.  
 Noble, Weller, Pacific Guano Co., Berkeley, Cal.  
 Nunnally, J. E., Cotton Producers Assn., Atlanta, Ga.  
 Owens, E. P., F. S. Royster Guano Co., Atlanta, Ga.  
 Parker, H. A., Sylacauga Fertilizer, Sylacauga, Ala.  
 Parker, W. H., Swift & Co., Plant Food Div., Atlanta, Ga.  
 Patterson, John E., Military Chemical Works, Kansas City, Mo.  
 Perkins, Edward F., International Minerals & Chemical Corp., Chicago, Ill.  
 Port, R. A., Bag-Pak, Inc., Atlanta, Ga.  
 Porter, L. G., U. S. Dept. of Agriculture, Washington, D. C.  
 Porter, J. Russell, American Potash & Chemical Corp., Atlanta, Ga.  
 Prindeville, C. T., Swift & Co., Chicago, Ill.  
 Ragan, C. S., Southern Cotton Oil Co., Goldsboro, N. C.  
 Reynolds, Paul, Swift & Co., Plant Food Div., Savannah, Ga.  
 Richey, H. G., Southern Cotton Oil Co., Atlanta, Ga.  
 Rider, H. P., Jacksonville Fertilizer Co., Jacksonville, Tex.  
 Rider, W. C., Tri-State Fertilizer Co., Shreveport, La.  
 Ritnour, William S., National Fertilizer Assn., Washington, D. C.  
 Rowe, Malcolm A., Rowe Whse. & Fertilizer Co., Athens, Ga.  
 Russell, E. S., Old Deerfield Fertilizer Co., Inc., South Deerfield, Mass.  
 Rutland, J. W., International Minerals & Chemical Corp., Atlanta, Ga.  
 Sachs, Ward H., duPont Co., Orlando, Fla.  
 Sanders, J. L., Coke Oven Ammonia Research Bureau, Birmingham, Ala.  
 Sargent, J. R., Federal Chemical Co., Louisville, Ky.  
 Savitz, Geo. V., International Minerals & Chemical Corp., New York, N. Y.  
 Schenck, Charles G., Raymond Bag Co., Middleton, O.  
 Schmelzer, C. S., Smith Agricultural Chemical Co., Columbus, O.  
 Scoggins, C. M., Commerce Fertilizer Co., Commerce, Ga.  
 Shallenberger, C. D., Shreveport Fertilizer Works, Shreveport, La.  
 Shirk, Carl R., Union Bag & Paper Co., Atlanta, Ga.  
 Shuey, Phil McG., Shuey & Co., Savannah, Ga.  
 Smith, George, Blue Belt Fertilizer Co., Savannah, Ga.  
 Snead, W. Alex, Potash Co. of America, Rickingham, N. C.  
 Sterne, A. H., Southern Agricultural Chemical Co., Atlanta, Ga.  
 Straughan, C. L., American Potash & Chemical Corp., Atlanta, Ga.  
 Struve, Oscar K., Eastern States Farmers' Exch., Buffalo, N. Y.  
 Taylor, Henry L., Sr., Barrett Division, Wilmington, N. C.  
 Taylor, Henry L., Jr., International Minerals & Chemical Corp., New York, N. Y.  
 Taylor, W. J., Catawba Fertilizer Co., Lancaster, S. C.  
 Techter, F. T., Allied Chemical & Dye Corp., New York, N. Y.  
 Ten Eyck, H. S., Southern Phosphate Corp., New York, N. Y.  
 Thomason, E. K., The Utility Works, East Point, Ga.  
 Thorne, E. M., The Millen Fertilizer Co., Millen, Ga.  
 Thornton, R. P., Thornton & Co., Tampa, Fla.  
 Thullbery, H. A., Haines City Fertilizer Works, Haines City, Fla.  
 Totman, J. E., Summers Fertilizer Co., Baltimore, Md.  
 Tunnell, Trenton, Ashcraft-Wilkinson Co., Atlanta, Ga.  
 Turner, Lee, Bag-Pak, Inc., Baltimore, Md.  
 Vance, K. R., F. S. Royster Guano Co., Atlanta, Ga.  
 Veitch, Samuel L., *The American Fertilizer*, Philadelphia, Pa.  
 Veth, C. E., Smith Agricultural Chemical Co., Columbus, O.  
 Wagner, Chas. D., Bemis Bro. Bag Co., Birmingham, Ala.  
 Waring, W. L., Jr., Lyons Fertilizer Co., Tampa, Fla.  
 Wehrenbrecht, H. J., Bemis Bro. Bag Co., New Orleans, La.  
 Wengert, Norman, Tennessee Valley Authority, Knoxville, Tenn.  
 Whipple, Merle W., Olds & Whipple, Inc., Hartford, Conn.  
 Whitaker, J. W., Swift & Co., Plant Food Division, Bartow, Fla.  
 White, Nelson T., Smith Agricultural Chemical Co., Columbus, O.  
 Whitsel, Travis S., Union Special Machine Co., Chicago, Ill.  
 Wiggins, T. N., L. O. Manry Co., Edison, Ga.  
 Wilcox, Ferol J., Swift & Co., Atlanta, Ga.  
 Wizeman, J. W., Civilian Production Administration, Washington, D. C.  
 Woods, F. J., Gulf Fertilizer Co., Tampa, Fla.  
 Wright, W. D., St. Regis Paper Co., New York, N. Y.  
 Yancey, E. G., Buckeye Cotton Oil Co., Atlanta, Ga.

## SULPHATE OF AMMONIA

## AMMONIA LIQUOR

**NITROGEN PRODUCTS, INC.**

630 Fifth Avenue—Radio City NEW YORK 20, N. Y.

Sales Agent

AGRICULTURAL AND INDUSTRIAL CHEMICALS

BenzolToluolXylol



# BUYERS' GUIDE • A CLASSIFIED INDEX TO ALL THE ADVERTISERS IN "THE AMERICAN FERTILIZER"

## AMMONIA—Anhydrous and Liquor

Barrett Division, The, Allied Chemical & Dye Corp., New York City.

DuPont de Nemours & Co., E. I., Wilmington, Del.

Hydrocarbon Products Co., New York City.

Nitrogen Products, Inc., New York City

## AMMONIUM NITRATE SOLUTIONS

Barrett Division, The, Allied Chemical & Dye Corp., New York City.

## BAG MANUFACTURERS—Burlap

Bemis Bro. Bag Co., St. Louis, Mo.

Burros Bag Co., Brooklyn, N. Y.

Fulton Bag & Cotton Mills, Atlanta, Ga.

Mente & Co., Inc., New Orleans, La.

Virginia-Carolina Chemical Corp., Richmond, Va.

## BAG MANUFACTURERS—Cotton

Bemis Bro. Bag Co., St. Louis, Mo.

Fulton Bag & Cotton Mills, Atlanta, Ga.

Mente & Co., Inc., New Orleans, La.

Virginia-Carolina Chemical Corp., Richmond, Va.

## BAG MANUFACTURERS—Paper

Bemis Bro. Bag Co., St. Louis, Mo.

Fulton Bag & Cotton Mills, Atlanta, Ga.

Hammond Bag & Paper Co., Weisburg, W. Va.

Jaite Company, The, Jaite, Ohio

Raymond Bag Co., Middletown, Ohio.

St. Regis Paper Co., New York City.

## BAGS—Dealers and Brokers

Ashcraft-Wilkinson Co., Atlanta, Ga.

Huber & Company, New York City.

McIver & Son, Alex. M., Charleston, S. C.

## BAG CLOSING MACHINES

St. Regis Paper Co., New York City.

## BAG PRINUING—Machinery

Schmutz Mfg. Co., Louisville, Ky.

## BAGGING MACHINES—For Filling Sacks

Exact Weight Scale Co., Columbus, Ohio

St. Regis Paper Co., New York City.

Sackett & Sons Co., The A. J., Baltimore, Md.

Utility Works, The, East Point, Ga.

## BONE BLACK

American Agricultural Chemical Co., New York City.

Armour Fertilizer Works, Atlanta, Ga.

Huber & Company, New York City.

## BONE PRODUCTS

American Agricultural Chemical Co., New York City.

Armour Fertilizer Works, Atlanta, Ga.

Ashcraft-Wilkinson Co., Atlanta, Ga.

Bradley & Baker, New York City.

Huber & Company, New York City.

McIver & Son, Alex. M., Charleston, S. C.

Scar-Lipman & Co., Inc., Irvington, N. J.

Schmaltz, Jos. H., Chicago, Ill.

## BORAX AND BORIC ACID

American Potash and Chem. Corp., New York City.

## BROKERS

Ashcraft-Wilkinson Co., Atlanta, Ga.

Bradley & Baker, New York City.

Huber & Company, New York City.

Keim, Samuel D., Philadelphia, Pa.

McIver & Son, Alex. M., Charleston, S. C.

Scar-Lipman & Co., Inc., Irvington, N. J.

Schmaltz, Jos. H., Chicago, Ill.

## BUCKETS—Elevator

Sackett & Sons Co., The A. J., Baltimore, Md.

Stedman's Foundry and Mach. Works, Aurora, Ind.

## BUCKETS—For Holsts, Cranes, etc.

Hayward Company, The, New York City.

## CARBONATE OF AMMONIA

American Agricultural Chemical Co., New York City

DuPont de Nemours & Co., E. I., Wilmington, Del.

## CARS AND CARTS

Hough Co., The Frank G., Libertyville, Ill.

Sackett & Sons Co., The A. J., Baltimore, Md.

Stedman's Foundry and Mach. Works, Aurora, Ind.

Utility Works, The, East Point, Ga.

## CHEMICALS

American Agricultural Chemical Co., New York City.

Armour Fertilizer Works, Atlanta, Ga.

Ashcraft-Wilkinson Co., Atlanta, Ga.

Barrett Division, The, Allied Chemical & Dye Corp., New York City.

Bradley & Baker, New York City.

DuPont de Nemours & Co., E. I., Wilmington, Del.

Huber & Company, New York City.

International Minerals & Chemical Corporation, Chicago, Ill.

McIver & Son, Alex. M., Charleston, S. C.

Nitrogen Products, Inc., New York City

Scar-Lipman & Co., Inc., Irvington, N. J.

Virginia-Carolina Chemical Corp., Richmond, Va.

## CHEMISTS AND ASSAYERS

Gascoyne & Co., Baltimore, Md.

Shuey & Company, Inc., Savannah, Ga.

Stillwell & Gladding, New York City.

Wiley & Company, Baltimore, Md.

## CONDITIONERS AND FILLERS

American Limestone Co., Knoxville, Tenn.

Keim, Samuel D., Philadelphia, Pa.

## COPPER SULPHATE

Tennessee Corporation, Atlanta, Ga.

## COTTONSEED PRODUCTS

Ashcraft-Wilkinson Co., Atlanta, Ga.

Bradley & Baker, New York City.

Huber & Company, New York City.

McIver & Son, Alex. M., Charleston, S. C.

Scar-Lipman & Co., Inc., Irvington, N. J.

Schmaltz, Jos. H., Chicago, Ill.

## CYANAMID

American Agricultural Chemical Co., New York City.

Ashcraft-Wilkinson Co., Atlanta, Ga.

Bradley & Baker, New York City.

Scar-Lipman & Co., Inc., Irvington, N. J.

## DRYERS

Sackett & Sons Co., The A. J., Baltimore, Md.

## ENGINEERS—Chemical and Industrial

Chemical Construction Corp., New York City.

Sackett & Sons Co., The A. J., Baltimore, Md.

Titlestad, Nicolay, New York City

Stedman's Foundry and Mach. Works, Aurora, Ind.

## FERTILIZER MANUFACTURERS

American Agricultural Chemical Co., New York City.

Armour Fertilizer Works, Atlanta, Ga.

International Minerals and Chemical Corporation, Chicago, Ill.

U. S. Phosphoric Products Division, Tennessee Corp., Tampa, Fla.

Virginia-Carolina Chemical Corp., Richmond, Va.

## FISH SCRAP AND OIL

Ashcraft-Wilkinson Co., Atlanta, Ga.

Bradley & Baker, New York City.

Huber & Company, New York City.

McIver & Son, Alex. M., Charleston, S. C.

Scar-Lipman & Co., Inc., Irvington, N. J.

## FOUNDERS AND MACHINISTS

Sackett & Sons Co., The A. J., Baltimore, Md.

Stedman's Foundry and Mach. Works, Aurora, Ind.

Utility Works, The, East Point, Ga.

A Classified Index to Advertisers in  
"The American Fertilizer"

## BUYERS' GUIDE

For an Alphabetical List of all the  
Advertisers, see page 37

### HOPPERS

Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### IMPORTERS, EXPORTERS

Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
Scar-Lipman & Co., Inc., Irvington, N. J.

### IRON SULPHATE

Tennessee Corporation, Atlanta, Ga.

### INSECTICIDES

American Agricultural Chemical Co., New York City.

### LIMESTONE

American Agricultural Chemical Co., New York City.  
American Limestone Co., Knoxville, Tenn.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
McIver & Son, Alex. M., Charleston, S. C.  
Scar-Lipman & Co., Inc., Irvington, N. J.

### LOADERS—Car and Wagon

Hough Co., The Frank G., Libertyville, Ill.  
Sackett & Sons Co., The A. J., Baltimore, Md.

### MACHINERY—Acid Making and Handling

Chemical Construction Corp., New York City.  
Monarch Mfg. Works, Inc., Philadelphia, Pa.  
Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### MACHINERY—Ammoniating

Sackett & Sons Co., The A. J., Baltimore, Md.

### MACHINERY—Elevating and Conveying

Hough Co., The Frank G., Libertyville, Ill.  
Hayward Company, The, New York City.  
Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### MACHINERY—Grinding and Pulverizing

Bradley Pulverizing Co., Allentown, Pa.  
Sackett & Sons Co., The A. J., Baltimore, Md.  
Sedberry, Inc., J. B., Utica, N. Y., Franklin, Tenn.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### MACHINERY—Material Handling

Hayward Company, The, New York City.  
Hough Co., The Frank G., Libertyville, Ill.  
Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### MACHINERY—Mixing, Screening and Bagging

Exact Weight Scale Co., Columbus, Ohio  
Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### MACHINERY—Power Transmission

Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.

### MACHINERY—Superphosphate Manufacturing

Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### MANGANESE SULPHATE

McIver & Son, Alex. M., Charleston, S. C.  
Tennessee Corporation, Atlanta, Ga.

### MIXERS

Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### NITRATE OF SODA

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Barrett Division, The, Allied Chemical & Dye Corp., New York City.

### NITRATE OF SODA—Continued

Bradley & Baker, New York City.  
Huber & Company, New York City.  
International Minerals & Chemical Corporation, Chicago, Ill.  
McIver & Son, Alex. M., Charleston, S. C.  
Scar-Lipman & Co., Inc., Irvington, N. J.  
Schmaltz, Jos. H., Chicago, Ill.

### NITROGEN SOLUTIONS

Barrett Division, The, Allied Chemical & Dye Corp., New York City.

### NITROGENOUS ORGANIC MATERIAL

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
DuPont de Nemours & Co., Wilmington, Del.  
Huber & Company, New York City.  
International Minerals & Chemical Corporation, Chicago, Ill.  
McIver & Son, Alex. M., Charleston, S. C.  
Scar-Lipman & Co., Inc., Irvington, N. J.

### NOZZLES—Spray

Monarch Mfg. Works, Philadelphia, Pa.

### PHOSPHATE ROCK

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
Huber & Company, New York City.  
International Minerals & Chemical Corporation, Chicago, Ill.  
McIver & Son, Alex. M., Charleston, S. C.  
Ruhm, H. D., Mount Pleasant, Tenn.  
Scar-Lipman & Co., Inc., Irvington, N. J.  
Schmaltz, Jos. H., Chicago, Ill.  
Southern Phosphate Corp., Baltimore, Md.  
Virginia-Carolina Chemical Corp., Richmond, Va.

### PLANT CONSTRUCTION—Fertilizer and Acid

Chemical Construction Corp., New York City.  
Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Titelstad, Nicolay, New York City  
Utility Works, The, East Point, Ga.

### POTASH SALTS—Dealers and Brokers

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
Huber & Company, New York City.  
International Minerals & Chemical Corporation, Chicago, Ill.  
Scar-Lipman & Co., Inc., Irvington, N. J.  
Schmaltz, Jos. H., Chicago, Ill.

### POTASH SALTS—Manufacturers

American Potash and Chem. Corp., New York City.  
Potash Co. of America, New York City.  
International Minerals & Chemical Corp., Chicago, Ill.  
United States Potash Co., New York City.

### PRINTING PRESSES—Bag

Schmütz Mfg. Co., Louisville, Ky.

### PYRITES—Brokers

Ashcraft-Wilkinson Co., Atlanta, Ga.

### REPAIR PARTS AND CASTINGS

Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### ROUGH AMMONIATES

Bradley & Baker, New York City.  
McIver & Son, Alex. M., Charleston, S. C.  
Scar-Lipman & Co., Inc., Irvington, N. J.  
Schmaltz, Jos. H., Chicago, Ill.

### SCALES—Including Automatic Bagging

Exact Weight Scale Co., Columbus, Ohio  
Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

## BUYERS' GUIDE

### SCREENS

Sackett & Sons Co., The A. J., Baltimore, Md.  
Stedman's Foundry and Mach. Works, Aurora, Ind.  
Utility Works, The, East Point, Ga.

### SEPARATORS—Air

Sackett & Sons Co., The A. J., Baltimore, Md.

### SPRAYS—Acid Chambers

Monarch Mfg. Works, Inc., Philadelphia, Pa.

### SULPHATE OF AMMONIA

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Barrett Division, The, Allied Chemical & Dye Corp., New York City.  
Bradley & Baker, New York City.  
Huber & Company, New York City.  
Hydrocarbon Products Co., New York City.  
McIver & Son, Alex. M., Charleston, S. C.  
Nitrogen Products, Inc., New York City  
Scar-Lipman & Co., Inc., Irvington, N. J.  
Schmaltz, Jos. H., Chicago, Ill.

### SULPHUR

Ashcraft-Wilkinson Co., Atlanta, Ga.  
Texas Gulf Sulphur Co., New York City.  
Virginia-Carolina Chemical Corp., Richmond, Va.

### SULPHURIC ACID

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
Huber & Company, New York City.  
International Minerals & Chemical Corporation, Chicago, Ill.  
McIver & Son, Alex. M., Charleston, S. C.  
Scar-Lipman & Co., Inc., Irvington, N. J.  
U. S. Phosphoric Products Division, Tennessee Corp., Tampa, Fla.

### SUPERPHOSPHATE

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
Huber & Company, New York City.  
International Minerals & Chemical Corporation, Chicago, Ill.  
McIver & Son, Alex. M., Charleston, S. C.  
Scar-Lipman & Co., Inc., Irvington, N. J.  
Schmaltz, Jos. H., Chicago, Ill.  
U. S. Phosphoric Products Division, Tennessee Corp., Tampa, Fla.

Virginia-Carolina Chemical Corp., Richmond, Va.

### SUPERPHOSPHATE—Concentrated

Armour Fertilizer Works, Atlanta, Ga.  
International Minerals & Chemical Corporation, Chicago, Ill.  
U. S. Phosphoric Products Division, Tennessee Corp., Tampa, Fla.  
Virginia-Carolina Chemical Corp., Richmond, Va.

### TANKAGE

American Agricultural Chemical Co., New York City.  
Armour Fertilizer Works, Atlanta, Ga.  
Ashcraft-Wilkinson Co., Atlanta, Ga.  
Bradley & Baker, New York City.  
International Minerals & Chemical Corporation, Chicago, Ill.  
McIver & Son, Alex. M., Charleston, S. C.  
Scar-Lipman & Co., Inc., Irvington, N. J.  
Schmaltz, Jos. H., Chicago, Ill.

### UREA

DuPont de Nemours & Co., E. I., Wilmington, Del.

### UREA-AMMONIA LIQUOR

DuPont de Nemours & Co., E. I., Wilmington, Del.

### VALVES

Monarch Mfg. Works, Inc., Philadelphia, Pa.  
Utility Works, The, East Point, Ga.

### ZINC SULPHATE

Tennessee Corporation, Atlanta, Ga.

## Alphabetical List of Advertisers

American Agricultural Chemical Co., New York City.....	6
American Limestone Co., Knoxville, Tenn.....	24
American Potash and Chemical Corp., New York City.....	4, 29
Armour Fertilizer Works, Atlanta, Ga.....	5
Ashcraft-Wilkinson Co., Atlanta, Ga.....	Front Cover
Bemis Bro. Bag Co., St. Louis, Mo.....	7
Bradley Pulverizing Co., Allentown, Pa.....	—
Bradley & Baker, New York City.....	16
Burros Bag Co., Brooklyn, N. Y.....	27
Chemical Construction Corp., New York City.....	—
Du Pont de Nemours & Co., E. I., Wilmington, Del.....	33
Exact Weight Scale Co., Columbus, Ohio.....	23
Fulton Bag & Cotton Mills, Atlanta, Ga.....	8
Gascoyne & Co., Inc., Baltimore, Md.....	38
Hammond Bag & Paper Co., Wellsburg, W. Va.....	29
Hayward Company, The, New York City.....	38
Hough Co., The Frank G., Libertyville, Ill.....	—
Huber Co., L. W., New York City.....	32
Hydrocarbon Products Co., New York City.....	19
International Minerals & Chemical Corporation, Chicago, Ill.....	25
Jaite Company, The, Jaite, Ohio.....	2nd Cover
Keim, Samuel D., Philadelphia, Pa.....	37
McIver & Son, Alex. M., Charleston, S. C.....	4
Mente & Co., Inc., New Orleans, La.....	31
Monarch Mfg. Works, Inc., Philadelphia, Pa.....	38
Nitrogen Products, Inc., New York City.....	34
Potash Co. of America, New York City.....	3rd Cover
Raymond Bag Co., Middletown, Ohio.....	18
Ruhm, H. D., Columbia, Tenn.....	38
Sackett & Sons Co., The A. J., Baltimore, Md.....	—
Scar-Lipman & Co., Inc., Irvington, N. J.....	30
Schmaltz, Jos. H., Chicago, Ill.....	38
Schmutz Mfg. Co., Louisville, Ky.....	3
Sedberry, Inc., J. B., Utica, N. Y., Franklin, Tenn.....	26
Shuey & Company, Inc., Savannah, Ga.....	38
Southern Phosphate Corp., New York City.....	38
Stedman's Foundry and Machine Works, Aurora, Ind.....	28
Stillwell & Gladding, New York City.....	—
St. Regis Paper Co., New York City.....	Back Cover
Tennessee Corporation, Atlanta, Ga.....	28
Texas Gulf Sulphur Co., New York City.....	—
Titlestad, Nicolay, New York City.....	—
U. S. Phosphoric Products Division, Tennessee Corp., Tampa, Fla.....	4
United States Potash Co., New York City.....	21
Utility Works, The, East Point, Ga.....	—
Virginia-Carolina Chemical Corp., Richmond, Va.....	—
Wiley & Company, Inc., Baltimore, Md.....	38

## COCOA TANKAGE

*Inquiries Invited*

**SAMUEL D. KEIM**

(SINCE 1898)

**1343 ARCH STREET  
PHILADELPHIA 7, PA.**

**MONARCH SPRAYS**

This is our Fig. 645 Nozzle. Used for Scrubbing Acid Phosphate Gases. Made for "full" or "hollow" cone in Brass and "Everdur." We also make "Non-Clog" Nozzles in Brass and Steel, and Stoneware Chamber Sprays now used by nearly all chamber spray sulphuric acid plants.

CATALOG 6-C

**MONARCH MFG. WORKS, INC.**

Westmoreland and Emery Sts., Philadelphia, Pa.

**HAYWARD BUCKETS**

Use this Hayward Class "K" Clam Shell for severe superphosphate digging and handling.

THE HAYWARD CO., 202 Fulton St., New York

**GASCOYNE & CO., INC.**

Established 1887

**Chemists and Assayers**

Public Weighers and Samplers

27 South Gay Street - BALTIMORE, MD.

**SHUEY & COMPANY, Inc.**

Specialty: Analysis of Fertilizer Materials and Phosphate Rock. Official Chemists for both Florida Hard Rock Phosphate and Pebble Phosphate Export Associations. Official Weigher and Sampler for the National Cottonseed Products Association at Savannah; also Official Chemists for National Cottonseed Products Association.

115 E. BAYSTREET, SAVANNAH, GA.

**H. D. RUHM****Phosphate Consultant**

305 W. 7th Street

COLUMBIA

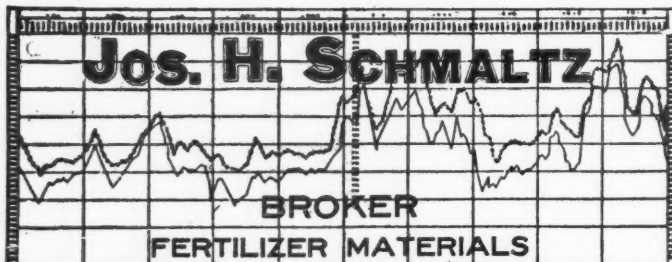
TENNESSEE

# WILEY & COMPANY, Inc.

*Analytical and Consulting Chemists*

BALTIMORE, MD.

Tankage  
Blood  
Bone  
All  
Ammoniates



327  
South  
La Salle  
Street  
CHICAGO

**OFFICIAL BROKER FOR MILORGANITE****SOUTHERN PHOSPHATE CORPORATION***Producers*

Florida Land Pebble Phosphate Rock

All Commercial Grades Including Ground Rock

Plants at Bonny Lake, Pauway, and Ridgewood, Florida

Main Office:  
BARTOW, FLORIDA

Sales Office:  
342 MADISON AVENUE, NEW YORK 17, NEW YORK

THE FIRST  
TEN YEARS...



We celebrate this year our tenth anniversary as a producer of high-grade Muriate of Potash. A decade of progress, development, and considerable expansion lies behind us; a decade of great importance lies ahead.

Our accomplishment in the past is due, in great measure, to encouragement, loyalty and confidence of our many friends. We face the future determined to deserve your continuing patronage and good-will through service of a high order to the fertilizer industry and to American agriculture.

## POTASH COMPANY of AMERICA

CARLSBAD, NEW MEXICO

GENERAL SALES OFFICE...50 Broadway, New York, N. Y. • MIDWESTERN SALES OFFICE...612 Lehmann Bldg., Peoria, Ill.

SOUTHERN SALES OFFICE...Mortgage Guarantee Building, Atlanta, Ga.





# A Simple Example of Multiwall Bag Economy



If it takes 3 men  
1 hr. to pack

**9,000 lbs.**

*in heavy barrels or fabric bags*

Why only 3 men  
1 hr. to pack

**18,000 lbs.**

*in Multiwall Paper Bags?*

Greater packing speed is only one of the advantages of Multiwall Bags and Bag-filling Equipment.

Multiwall Bags actually improve working conditions. They are tight and siftproof. They are compact and easy to handle.

With Multiwall Paper Valve Bags, your product is accurately preweighed . . . before the bags are closed. And, the bags require no tedious shaking by hand to assure proper settlement.

Multiwalls are closed automatically by the internal pressure of their contents. There is no bother with troublesome lids or hand-sewing. By this method, a single man, operating two filling machines, can keep two other men busy checking and stacking the bags at the rate of 18,000 lbs. per hour.

## Space-Saving Advantage

Five hundred empty 100-lb. Multiwall Paper Bags can be stored in approximately the same space as one 200-lb. barrel. Think what this means in saving valuable plant floor space.

In fact, Multiwalls mean economy and improved packaging all along the line. These bags will be specially made to fit your particular requirements. For full information, write your nearest St. Regis office today.



MULTIPLY PROTECTION • MULTIPLY SALEABILITY  
**ST. REGIS PAPER COMPANY**  
TAGGART CORPORATION

NEW YORK 17: 230 Park Ave.

CHICAGO 1: 230 No. Michigan Ave.

BALTIMORE 2: 2401 O'Sullivan Bldg.

SAN FRANCISCO 4: 1 Montgomery St.

## IN CANADA:

St. Regis Paper Co. (Can.) Ltd.  
Montreal, Quebec  
Vancouver, British Columbia

Birmingham

Boston

Cleveland

Dallas

Denver

Detroit

Franklin, Va.

Los Angeles

Nazareth, Pa.

New Orleans

No. Kansas City, Mo.

Seattle

Toledo

gs  
as  
ng  
  
ed  
be  
ts.  
yis

SALEABILITY  
**MPANY**

higan Ave.  
gomery St.

nklin, Va.

Toledo